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JUL 11 1955
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FOUNDED BY DR. MAX THOREK

DEDICATED TO THE MEMORY OF
OTIS R. WOLFE, M.D., F.I.C.S.

WITH A SPECIAL SECTION ON OPHTHALMOLOGY
Paul C. Craig, M.D., F.A.C.S., F.I.C.S.
Section Editor

Pages 735-846

In Two Parts — Section I

Vol. XXIII *June, 1955* No. 6

For the "Tuberculosis Therapy Team"

The SURGERY of PULMONARY TUBERCULOSIS

By JAMES H. FORSEE, A.B., B.S., M.D., F.A.C.S., F.A.C.P.

Colonel, M. C., U. S. Army; Chief, Surgical Services, Fitzsimons Army Hospital, Denver, Colorado.

This is the first book devoted exclusively to this subject, based on American experience, in fifteen years! "In the short period since the end of World War II there has been practically a revolution in our thinking about the performance of direct surgical procedures for the purpose of removing the diseased portion of the lung." Thus does Dr. Evarts A. Graham preface his remarks in his *Foreword* to this comprehensive book.

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For surgeons, the complete details of operative technics, procedures and pre- and post-operative management are enhanced by proper timing of surgical intervention. Phthisiologists and internists will detect a surgical approach which stresses medical aspects and essentiality of the mutual efforts of surgery and medicine to further improve the therapy of pulmonary tuberculosis. Pathologists will appreciate the correlation of pathological findings of the surgically removed lung tissue, with indications and timing of surgery. Roentgenologists will find their interests and efforts encouraged by the detailed appraisal of clinical and pathological features.

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(Published June, 1954)

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Original Articles

Distribution of Nerves Within the Pancreas

An Experimental Investigation

FERNANDO ALVARADO, M.D., M.M.Sc., F.I.C.S.*

SAN SALVADOR, EL SALVADOR, CENTRAL AMERICA

SINCE the latter part of the last century, investigators have devoted their attention to the distribution of the nerves of the pancreas, and even some of the early studies have contributed a great share of current knowledge of the detailed distribution of the intrinsic nerves of this organ. Since the beginning of this century numerous articles have been published, describing valuable information obtained by physiologic methods for tracing nerve pathways. It was not until recent years, however, that the distribution and functional classification of the extrinsic nerves to the pancreas were clarified.

Although the distribution of the splanchnic nerves to the pancreas has been studied extensively, I have been unable to find any anatomic investigations of the distribution within the pancreas of the sensory fibers supplied by each set of splanchnic nerves. The necessity for such knowledge has become increasingly apparent with the application of procedures designed to afford relief from intractable pain of pancreatic origin, through interruption of afferent impulses from this organ. This pain may be mild or nagging, but in some cases it is so intolerable that the patient becomes addicted to opiates. Considerable effort has been expended by surgeons in an attempt to devise procedures that would afford relief to such patients. Waugh and others in 1946,[1] and Whipple,[2] performed partial and even total

Thesis submitted in partial fulfillment of requirements for the degree of Master of Medical Science.

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pancreatectomy for intractable pain produced by pancreatic disease, but these operations were associated with such a high mortality rate that many other surgical procedures have been devised; the latter were reviewed recently by Warren[3] (1950). Interruption of afferent impulses from the pancreas, however, seems to be the most direct and efficient approach to the problem. Popper[4] (1931) reported having abolished pain in 3 patients with acute pancreatitis by blocking the eighth through the tenth dorsal paravertebral ganglia on the left side. In 1 of his patients there was persistent postoperative pain and tenderness in the right upper abdominal quadrant, which he attributed to the coexisting acute cholecystitis. Mallet-Guy[5] and his associates (1945) were able to abolish pain in 9 of 10 patients with chronic pancreatitis treated by left splanchnicectomy, but in 1 of the patients pain recurred five months after the operation. Smithwick[6] (1946) reported the case of a patient treated successfully by transthoracic resection of the sympathetic trunk on the right side, from the third through the twelfth dorsal level, and of the great splanchnic nerve from the celiac ganglion to the midthoracic level. Reinhoff and Baker[7] (1947) treated 1 patient by bilateral resection of the sympathetic trunk from the fifth dorsal to the second lumbar level, including the splanchnic nerves and celiac ganglia, plus bilateral supradiaphragmatic vagectomy. Gage and Floyd[8] (1947) reported 4 cases in which bilateral splanchnic block immediately

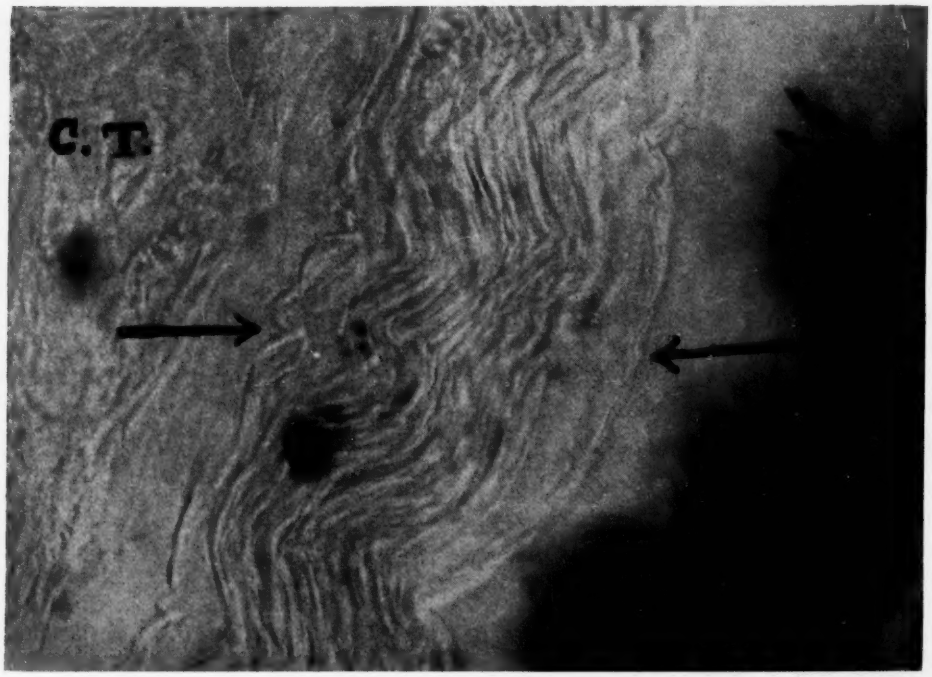

Fig. 1.—Photomicrograph of a nerve trunk in a cat's pancreas. Arrows indicate a normal nerve trunk; *C.T.* indicates connective tissue fibers, stained by Swank and Davenport's technic. The black areas are artefacts. (× 400.)

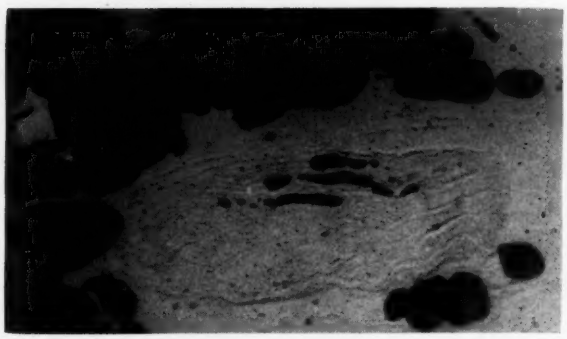

Fig. 2.—Photomicrograph of a nerve trunk with degenerating myelinated fibers surrounded by artefacts. (× 80.)

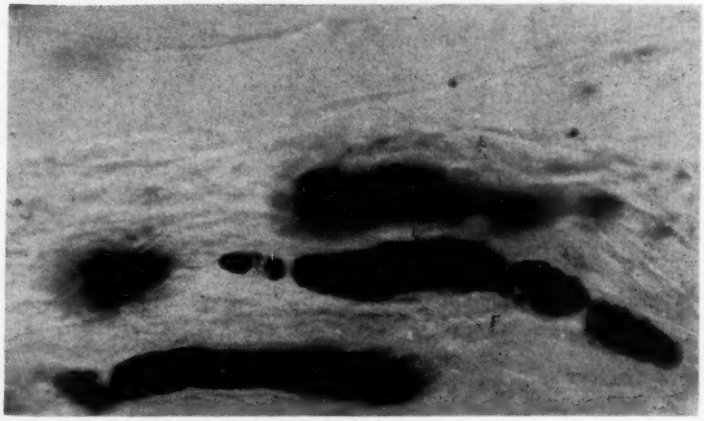

Fig. 3.—Higher magnification of the degenerating myelinated fibers illustrated in Figure 2. (× 400.)

relieved the pain of acute pancreatitis. DeTakats and his co-workers[9] (1950) treated 7 patients with pain of pancreatic origin by unilateral splanchnicectomy, the side operated upon being the side of predominant pain. In the 2 patients with inoperable carcinoma of the pancreas the relief was temporary, whereas in all 5 with chronic calcareous pancreatitis the results were considered excellent. However, in 2 of these 5 patients pain recurred on the opposite side of the abdomen after unilateral splanchnicectomy, and the same operation had to be performed on that side. The authors concluded that "a certain group of patients, whose pancreatic involvement is diffuse, may have the second splanchnic nerve cut after the pain subsides and shifts from the dominant to the silent side."

The various technics used by different surgeons in the treatment of pain of pancreatic origin have been discussed in some detail in the preceding paragraphs. All were designed to interrupt the sensory impulses coming from the pancreas in an attempt to relieve the intolerable pain of pancreatitis. Yet each one of them differs from all the others, particularly as to the side and extent of operation. Therefore, the question arises: why do different sur-

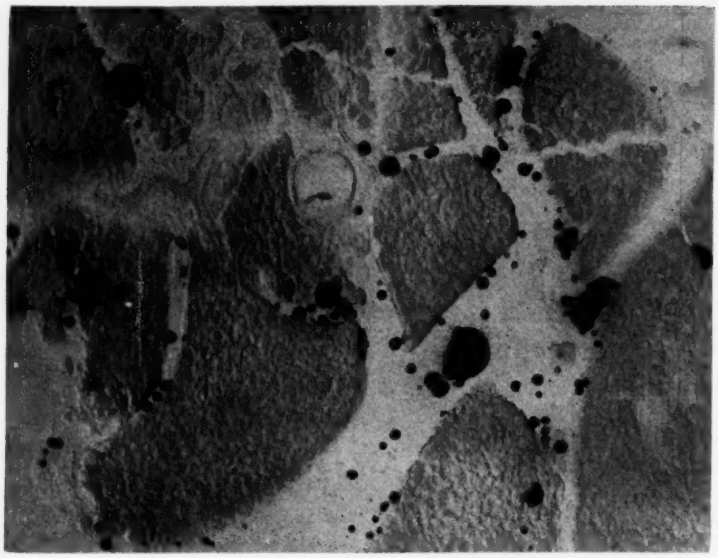

Fig. 4.—Artefacts in a section stained by Swank and Davenport's technic. (× 80.)

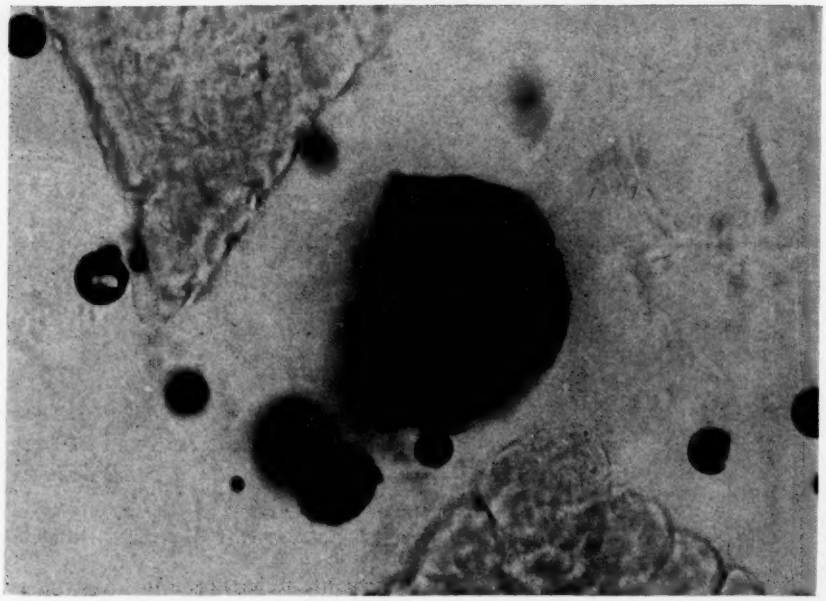

Fig. 5.—Higher magnification of the same artefacts shown in Figure 4. (× 400.)

geons have different opinions as to the type of operation that should be done in order to interrupt the afferent impulses coming from the pancreas? In my opinion, such differences in reasoning are at least partly due to the lack of sufficient infor-

mation regarding the exact distribution of the sensory nerves of the pancreas.

Ray and Neill[10] (1947) and Ray and Console[11] (1949), who operated on patients after infiltration of the anterior abdominal wall with procaine hydrochloride, were able to elicit pain in these patients by stimulating the afferent nerves of the pancreas by means of manipulation, local traction and faradic stimulation of this organ. They did this in unsympathectomized patients first, and then in patients who had undergone unilateral or bilateral sympathectomy. By the term "sympathectomy" they meant either resection of the ganglionated chain from the seventh dorsal to the third lumbar level and of the greater splanchnic nerve between the celiac ganglion and a point above the contribution of the seventh ramus, or resection of the chain from the eleventh dorsal to the first lumbar level and 6 to 8 cm. of the distal part of the greater splanchnic nerve. They concluded that the innervation of the pancreas is bilateral and that absolute analgesia of the pancreas can be achieved only by bilateral sympathectomy. They also observed that the parietal peritoneum overlying the pancreas loses its sensitivity to pain after bilateral sympathectomy, an observation which suggests that this part of the parietal peritoneum is supplied by visceral afferent rather than somatic afferent fibers. However, by exerting pressure and traction, or even by applying a mild faradic current, it is impossible to determine the exact extent of the area stimulated; consequently. by their technic the exact distribution of the sensory fibers within the pancreas cannot be determined.

Since the pancreas lies at first near the midline, in an anteroposterior direction in the embryo, it is possible that the anterior surface, which originally faced the left side, is supplied by fibers from the left splanchnic nerves, whereas the posterior surface, which originally faced the right side, is supplied with fibers from the right splanchnic nerves.

The purpose of the present study was to determine whether or not there is any segmental distribution within the pancreas between the sensory fibers from the right and left splanchnic nerves.

Review of the Literature.—As early as 1878 Pavlov[12] demonstrated, by stimulating the vagi below the heart, that these

Fig. 6.—Artefact resembling a degenerating nerve fiber coursing through a lobule of pancreatic acini. (× 400.)

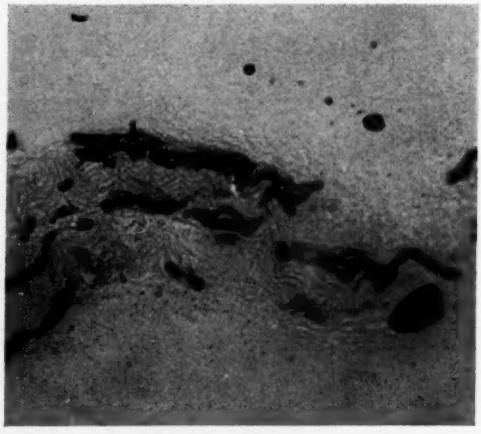

Fig. 7.—Photomicrograph showing degenerating myelinated fibers in the uncinate process after right splanchnicectomy. (× 80.)

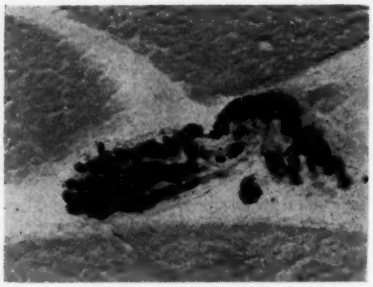

Fig. 8. — Photomicrograph showing nerve trunk with degenerated myelinated fibers in the first part of the head of the pancreas after right splanchnicectomy. (× 80.)

nerves contain secretory fibers to the pancreas. He obtained a similar though less pronounced effect after sympathetic stimulation.

The first attempt at an anatomic approach to a study of the pancreatic innervation was made by Cajal and Sala[15] (1891). They noted double innervation for the acini from isolated sympathetic nerve cells and from unmyelinated nerve fibers that were observed to follow blood vessels until they reached the periacinar tissues, where, together with the sympathetic nerve cells, they formed periacinar plexuses. Fine nerve filaments were observed leaving the periacinar plexuses and going through the membrana propria to enter the intercellular cement, where they terminated as small, rounded thickenings or *boutons*. The sympathetic cells in the periacinar plexuses were described as having a triangular shape and giving off three or more branches, which divide and

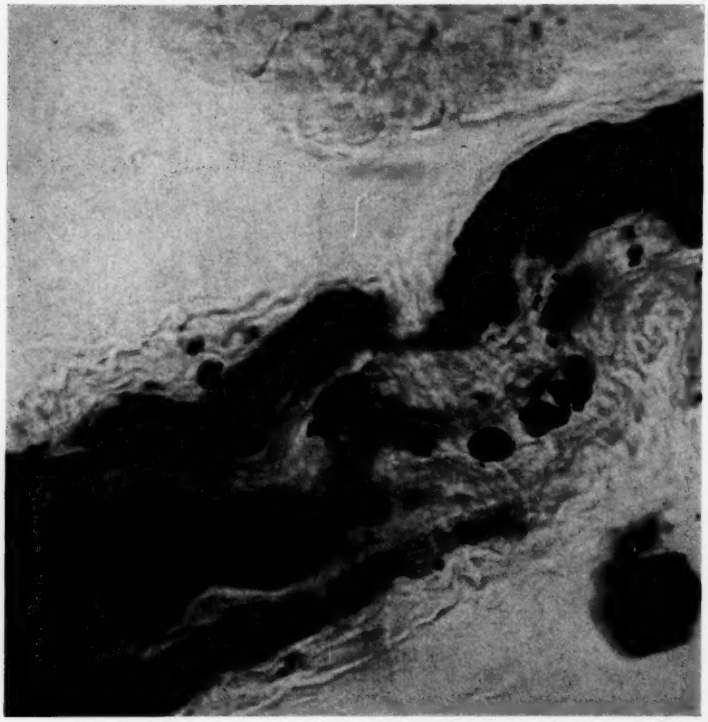

Fig. 9.—Higher magnification of the degenerating fibers illustrated in Figure 8. (× 400.)

subdivide at acute angles, thus giving rise to multiple extensions that intermingle with branches from the unmyelinated nerves. The double innervation of the pancreas described by Cajal and Sala was supported by Muller[14] (1892), who differed from Cajal and Sala in that he thought it was more plausible for the contact between the acinar cells and fine branches from the nerve plexuses to take place at the external surface of the epithelial elements.

Since the publications of Cajal and Sala[13], and those of Muller,[14] numerous investigators have devoted a great deal of effort and time to the morphologic study of nervous elements within the pancreas. Pensa[15] (1905) described nerve plexuses associated with the pancreatic islets. Van Campenhout[16] (1925 and 1927), Simard[17] (1935, 1937 and 1942) and Alipio-Lobo[18] (1942), studied the ganglion cells within the pancreas.

Castro[19] (1922) published an extensive monograph describing the results of his anatomic investigations on the intrinsic nerves of the pancreas. His observations may be summarized as follows:

1. Within the pancreas there are two types of nerve fibers, which form a perivascular plexus as they travel along with the blood vessels. These are myelinated fibers and unmyelinated nerves or fibers of Remak. The myelinated nerves are grouped, according to the thickness of the fiber, into heavily myelinated and finely myelinated nerves.

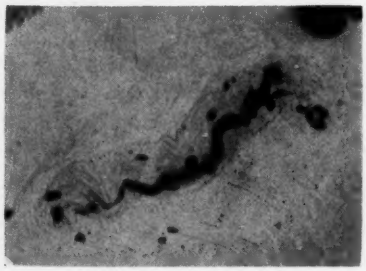

Fig. 10.—Photomicrograph of another nerve trunk with degenerating fibers near the middle of the head of the pancreas after right splanchnicectomy. (× 80.)

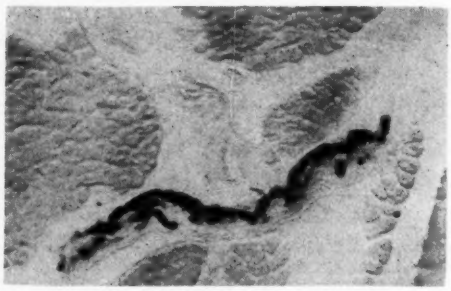

Fig. 11.—Photomicrograph showing degenerating nerves in the neck of the pancreas after right splanchnicectomy. (× 80.)

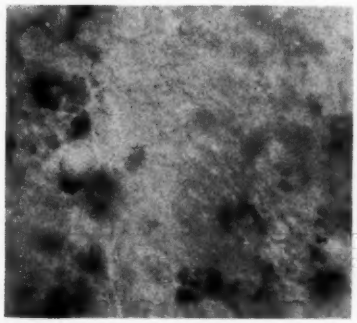

Fig. 12.—Cross sections (indicated by small black dots) of finely myelinated fibers undergoing degeneration after right splanchnicectomy. These fibers are located near the anterior surface in the region of the neck of the pancreas. (× 900.)

2. The innervation of the acini is from fibers of the unmyelinated group, which form a periacinar plexus as described by Cajal[13] (1891), and whose peripheral ends terminate either on the free surface of the acinar cells or between the cells.

3. Both myelinated and unmyelinated fibers reach the islands of Langerhans, and together they form a rich peri-insular plexus around the surface of the islets. The unmyelinated nerves that enter into

Fig. 13. — Photomicrograph showing degenerating fibers in the first portion of the body of the pancreas after right splanchnicectomy. (× 80.)

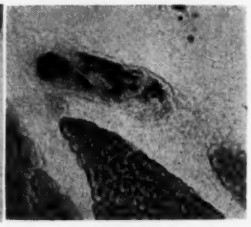

Fig. 14. — Photomicrograph showing degenerating nerves near the middle of the body of the pancreas after right splanchnicectomy. (× 80.)

the formation of this plexus give off collaterals that terminate either on the periphery of the islets or penetrate to the interior along with the blood vessels, where they ramify and terminate on the epithelial cells. The myelinated nerves, on the other hand, are limited to the peri-insular plexus and do not participate in the cellular innervation of the islands.

4. In the vicinity of the entrance of the major blood vessels to the pancreas there is a voluminous sympathetic ganglion composed of multipolar elements, between which there is a rich intercellular plexus of myelinated fibers.

5. Sympathetic nerve cells in the pancreas are either isolated or, more commonly, arranged in groups forming ganglia, which are found chiefly around the blood vessels and around the islands. These cells are also multipolar and of small and large sizes, and they lie in close contact with rather thick nerve bundles. These ganglia are connected with unmyelinated nerve fibers, some of which are probably coming from the peri-insular plexuses, and myelinated fibers, which are seen branching around these ganglia forming intricate intercellular plexuses.

6. The nerves to the blood vessels form three definite plexuses in the walls of the large and medium-sized vessels: the adventitial plexus located in the adventitia, the intermedian plexus found just beneath the first one and the muscular plexus in the muscularis of the vessel. All three plexuses are formed by fibers of the unmyelinated nerves from the perivascular bundles. The muscular plexus is formed by the terminal ramification of these fibers, and its outstanding characteristic is a transverse orientation of the trabeculae. In the smaller blood vessels there are only two plexuses, the adventitial and the muscular.

7. In the adventitia of the large blood vessels there are arborescent ramifications from myelinated nerves, but these fibers always lose their myelin upon entering the walls of the vessel. The characteristic feature of the termination of these fibers is a longitudinal orientation.

8. The nerve fibers to the capillaries are branches of the myelinated nerves.

9. The innervations of the acini, the islands of Langerhans and the blood vessels are completely independent. Nerves to the blood vessels are not seen innervating epithelial elements; nerves to the acinar cells do not innervate cells in the islands, or vice versa.

Thus, Castro observed three groups of unmyelinated fibers: those to blood vessels, those to acinar cells, and those to cells in the islands of Langerhans. He noted only two different kinds of myelinated fibers: heavily myelinated and finely myelinated. Of these, some terminate by forming arborizations in the intrinsic ganglia and the others by projecting their branches into the walls of the blood vessels. Castro

Fig. 15. — Photomicrograph showing degenerating fiber which has undergone considerable fragmentation near the distal portion of the body of the pancreas after right splanchnicectomy. (× 80.)

was unable to find Pacinian corpuscles in the rat's pancreas.

After such an extensive study of the anatomic distribution of the nerves within the pancreas, it remained for investigators to determine the origin of the different nerve fibers described; in other words, to undertake investigation of the extrinsic innervation of the pancreas. Mellanby[20a] (1926), experimenting on cats, observed that paralysis of the vagus by the intravenous injection of atropine or paralysis of the motor side of the sympathetic system by intravenous injection of ergotamine did not diminish the capacity of bile to act as an alimentary stimulus for the secretion of pancreatic juice. After further experimentation, Mellanby, in the same year, concluded that the metabolism of the enzymes of the pancreas is under the control of the vagus nerves, while the quantity of fluid and the bicarbonate content of this fluid are determined by secretin.[20b] Korovitsky[21] (1923) observed that stimulation of the vagus failed to produce exocrine secretion into a cannula connected to the pancreatic duct, but he was able to demonstrate that such results are due to constriction of the pancreatic ducts brought about upon stimulation of the vagus, causing temporary retention of the secretory juice. Baxter[22] (1931), in experiments on rabbits, obtained results somewhat different from those of the other investigators. His observations can be summarized as follows: 1. The vagus nerves are true secretory nerves to the pancreas and possess motor fibers to the ducts. 2. Section of the parasympathetic nerves to the pancreas has no remarkable effect on the rate of the secretion or the enzyme content. 3. Stimulation of the splanchnics produces, after preliminary inhibition, an increase in the rate of secretion and a definite rise in the tryptic power of the pancreatic juice. In this, he obtained similar results with repeated injections of small amounts of epinephrine. 4. Section of the splanchnic nerves produces an immediate and profound fall in the enzyme content of the pancreatic secretion, with a lasting effect.

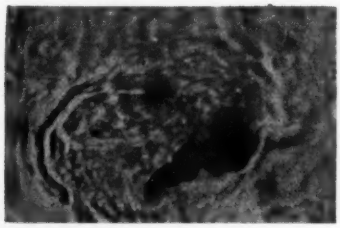

Fig. 17.—Oblique view of a nerve trunk with a degenerating fiber in the uncinate process after left splanchnicectomy. (× 400.)

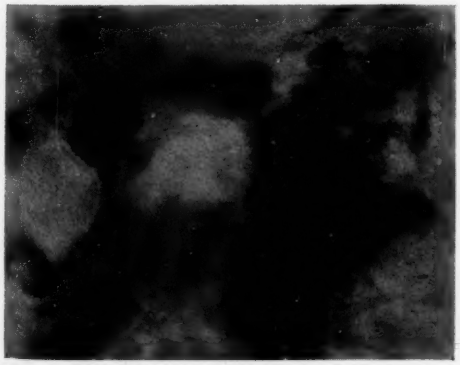

Fig. 16.—Photomicrograph showing degenerating finely myelinated nerves near the posterior surface in the tail of the pancreas after right splanchnicectomy. (× 900.)

Babkin, Hebb and Sergeyeva[23] (1939) noted that stimulation of the splanchnics in the dog and cat brings about an increase of exocrine secretion comparable in all respects to that produced by vagal stimulation. Unlike Baxter,[22] these investigators were not able to reproduce the secretory action of the splanchnics by administrating epinephrine. They concluded that the splanchnics convey secretory fibers to the acinar cells of the pancreas, which are preganglionics that do not make synaptic connections in the celiac

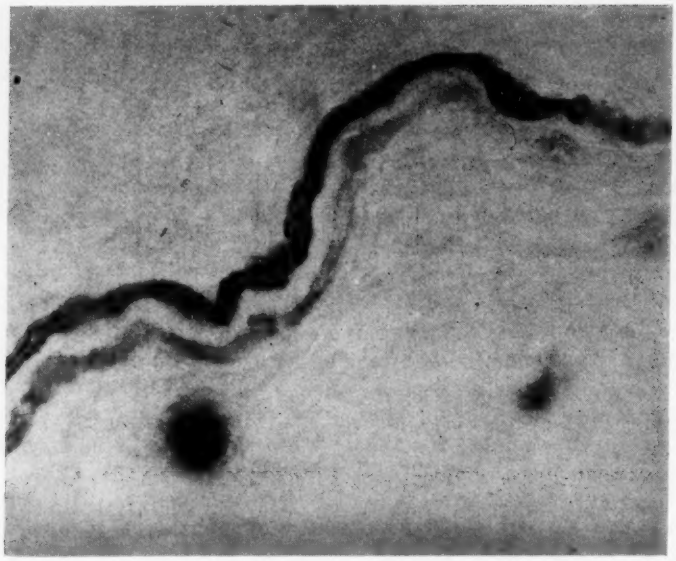

Fig. 18.—Longitudinal view of two degenerating myelinated fibers near the first portion of the head of the pancreas after left splanchnicectomy. (× 400.)

ganglia but relay at or in the pancreas itself, and their postganglionic fibers are represented by short neurons within the gland. The scantiness of the pancreatic secretion produced under the influence of the splanchnics was considered to be due to the relatively small number of acinar cells that receive secretory fibers from the sympathetic division.

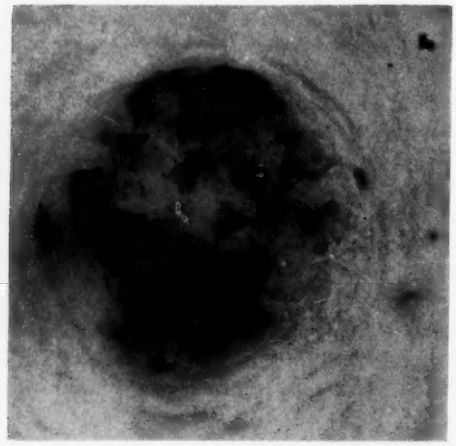

Fig. 19.—Cross section of a nerve trunk with several degenerating myelinated fibers near the first portion of the head of the pancreas after left splanchnicectomy. (× 400.)

The variability of the results obtained in the numerous physiologic experiments performed left the question of the extrinsic innervation of the pancreas unsettled, and it remained for Richins[24] (1945) to clarify this problem by means of extensive anatomic investigation. Richins dissected the nerves supplying the cat's pancreas; using silvered preparations, he observed that all nerves to the pancreas pass through the celiac plexus, and from there they may follow several pathways along the splenic, superior mesenteric, and pancreaticoduodenal arteries. He noted that by far the most important single unit of nerves supplying the pancreas was the bundle coursing along with the pancreaticoduodenal artery. There-

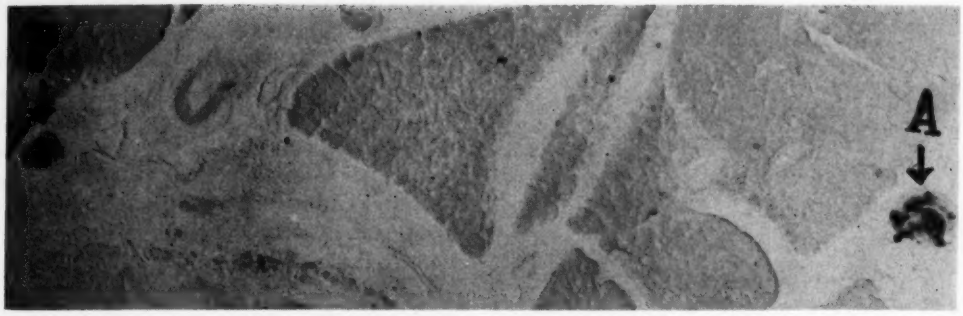

Fig. 20.—Two nerve trunks (indicated by arrows) with degenerating nerve fibers located near the anterior surface (*A*) and near the posterior surface (*P*) in a section through the middle of the head of the pancreas after left splanchnicectomy. (× 80.)

fore, in preparations stained by the activated protargol technic, he counted all the nerve fibers around this artery proximal to the point at which it branches to supply the pancreas, and obtained a ratio of myelinated to unmyelinated fibers. He also made counts of the nerve fibers distal to the intrinsic pancreatic ganglia in intact animals. Then in one series of animals he performed celiac ganglionectomy to degenerate all nerves passing through or originating within these ganglia. In a second series the vagi were severed around the lower part of the esophagus in order to degenerate the parasympathetic preganglionic fibers and sensory vagal components, if any. In a third series the splanchnic nerves were severed bilaterally to degenerate the visceral afferents and sympathetic preganglionic fibers. In a fourth

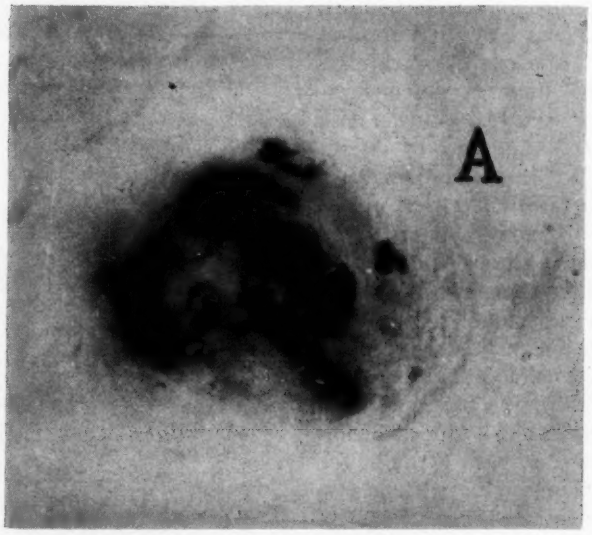

Fig. 21.—Higher magnification of the nerve trunk located near the anterior surface of the pancreas, illustrated in Figure 20. (× 400.)

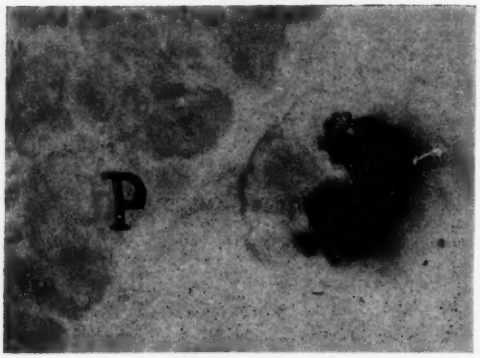

Fig. 22.—Higher magnification of the nerve trunk located near the posterior surface of the pancreas, illustrated in Figure 20. (× 400.)

series of cats the celiac ganglia were removed and the vagi severed, but this proved to be unnecessary, since all vagal fibers to the pancreas were later found to be interrupted by removal of the celiac ganglia alone. Complete degeneration of the interrupted nerve fibers was insured by allowing the animals to live for three weeks after operation. He then determined the ratios of myelinated to unmyelinated nerve fibers proximal and distal to the intrinsic pancreatic ganglia, and studied the destination of the remaining fibers which had not undergone degeneration in each of the series of animals. His observations were as follows:

1. All nerves to the pancreas pass through the celiac plexus.

2. The splanchnic nerves are made up of two sets of fibers: visceral afferent fibers and preganglionic sympathetic fibers.

3. All the preganglionic sympathetic components of the splanchnics terminate by synapsing in the celiac ganglia.

4. The sympathetic postganglionic nerves to the pancreas, whose cell bodies lie in the celiac plexus, pass through the intrinsic pancreatic ganglia without establishing any synaptic connections in them, and are distributed solely to the pancreatic blood vessels.

5. All the vagal fibers to the pancreas are myelinated preganglionic parasympathetics which pass through the celiac plexus without establishing synaptic connections in it, and terminate by synapsing in the intrinsic pancreatic ganglia.

6. The axons of the parasympathetic postganglionic nerves, whose cell bodies are in the intrinsic pancreatic ganglia, are nonmyelinated and go to innervate the acinar cells, the cells in the pancreatic islets, and the smooth muscle of the ducts.

7. The sympathetic and parasympathetic postganglionic fibers in the pan-

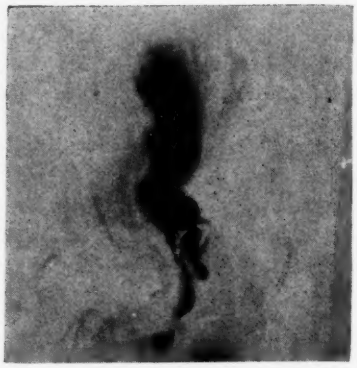

Fig. 23. — Typical varicose appearance of a degenerating myelinated fiber cut obliquely near the distal portion of the head of the pancreas after left splanchnicectomy. (× 400.)

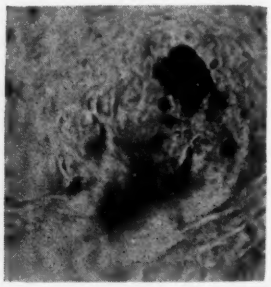

Fig. 24. — Oblique view of degenerating nerves in the neck of the pancreas after splanchnicectomy on the left side. (× 400.)

creas are comparable in numbers.

8. All sensory nerves reach the pancreas via the splanchnics, and there are no vagal sensory fibers.

9. The pacinian corpuscles are the most conspicuous sensory end organs within the cat's pancreas, and a large sensory fiber passes directly into every corpuscle, where it enlarges to form the axial core.

It is generally thought that the sympathetic nerves are vasoconstrictors. Though the work of Richins clarified much of the concept of the extrinsic innervation of the pancreas, there was one important question that remained to be answered: If the pancreatic blood vessels are innervated only by sympathetic fibers, how can stimulation of the splanchnics bring about an increase of exocrine secretion? Kuntz and Richins[25] (1949) answered this question, after having done a series of physiologic experiments in which they confirmed some of the observations of other investigators, namely, that faradic stimulation of the vagi augments the rate of pancreatic exocrine secretion, and stimulation of the splanchnic nerves also augments the flow of pancreatic juice. They noted additionally that stimulation of the celiac plexus before or after functional degeneration of the parasympathetic preganglionic fibers also increased the flow of pancreatic juice, and this result persisted after depression of the adrenergic nerves with ergotoxine phosphate. Stimulation of the celiac ganglia under similar conditions, but with paralysis of cholinergic fibers by atropine sulfate, resulted in inhibition of the flow of pancreatic fluid. Kuntz and Richins concluded that (1) the postganglionic sympathetic nerve supply of the pancreas is composed of cholinergic and adrenergic fibers; (2) the increase in the rate of flow of pancreatic juice resulting from stimulation of cholinergic nerves alone is secondary to the vasodilatory effect of the impulses carried by the cholinergic sympathetics; inhibition of the flow of pancreatic fluid resulting from stimulation of the adrenergic fibers alone is secondary to the vasoconstrictor effect of the impulse carried by adrenergic sympathetics, and (3) since stimulation of the celiac ganglia following vagal degeneration and without administration of drugs results in an increased rate of secretion of pancreatic juice, the cholinergic sympathetic fibers passing from the celiac ganglia to the pancreatic blood vessels are probably more numerous than the adrenergic ones.

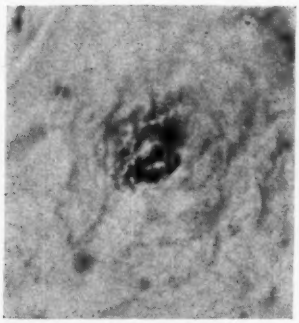

Fig. 25. — Degenerating finely myelinated nerves cut on cross section in the first portion of the body of the pancreas after left splanchnicectomy. (× 900.)

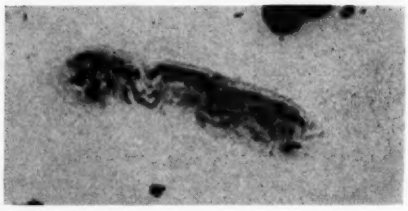

Fig. 26.—Longitudinal section of a nerve trunk containing several degenerating myelinated fibers in the first portion of the body of the pancreas after left splanchnicectomy. (× 80.)

In summary, the innervation of the pancreas includes sympathetic, parasympathetic and afferent or sensory nerves. Each efferent limb of either the parasym-

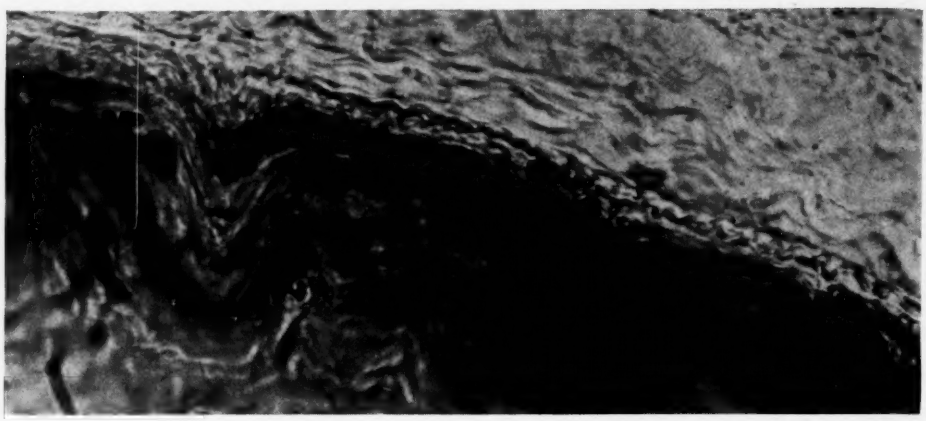

Fig. 27.—Same nerve trunk as shown in Figure 26, under higher magnification. (× 400.)

pathetic or sympathetic division is composed of two neurons: a preganglionic and a postganglionic neuron. The preganglionic fibers of the parasympathetic division reach the pancreas via the vagus nerves and terminate by synapsing with the postganglionic parasympathetics at the intrinsic ganglia within the pancreas. The parasympathetic postganglionics innervate the acinar cells, the cells of the islets and the smooth muscle of the ducts. The preganglionic fibers of the sympathetic division reach the celiac ganglia via the splanchnic nerves, where they synapse with the sympathetic postganglionics, which are of two kinds: cholinergic and adrenergic. The sympathetic postganglionics to the pancreas innervate only the blood vessels. The cholinergic sympathetic postganglionic fibers are probably more numerous than the adrenergic fibers.

According to Kuntz,[26a] the cell bodies of the visceral afferent nerves are located in the spinal ganglia, their axons being of intermediate size and myelinated. Their peripheral processes reach the celiac ganglia via the splanchnic nerves, pass through this plexus without interruption (Kuntz[26b]) and enter the pancreas to terminate in one of the different receptors: in the pacinian corpuscles, as described by Ceelen[27] (1912) and Richins[24] (1945); in the walls of the blood vessels, as described by Castro[19] (1922), or as unencapsulated fiber terminations, according to Kuntz[26a] (1945).

Richins[24] has already demonstrated that all sensory fibers to the pancreas reach the gland via the splanchnic nerves. The distribution of the sensory fibers from the right and left splanchnics within the pancreas remains to be investigated. A study to determine this distribution has been made on a series of cats. In one-half of the animals, splanchnicectomy was performed on the left, and in the remaining animals it was performed on the right side. The degenerating sensory nerves were traced within the pancreases in multiple cross sections taken through the entire organ.

Materials and Methods. — Eight cats and 1 *human* pancreas were used. The human pancreas, used for the purpose of comparison only, was obtained at necropsy of a child who died from severe pulmonary infection, which failed to respond to chemotherapy, on the sixth day after right

splanchnicectomy for fibrocystic disease of the pancreas. The pancreas, together with the duodenum, had been removed soon after the patient died; the first portion of the superior pancreaticoduodenal artery was dissected free, a cannula inserted into it and the organ perfused with a 10 per cent solution of neutral solution of formaldehyde. After perfusion the pancreas was placed in 10 per cent neutral solution of formaldehyde and allowed to remain there for approximately five weeks. The right splanchnic nerves were dissected in this patient at necropsy and were seen to have been adequately sectioned below the diaphragm.

The other 8 pancreases used in these experiments belonged to cats which had been separated into two groups for experimental purposes: In 4 of the cats splanchnicectomy was done on the right side; in the other 4, on the left. The technic for this procedure was similar to the one used on the child, and during the performance of all operations aseptic precautions were observed. After the production of anesthesia by the intraperitoneal injection of pentobarbital sodium, an incision was made just below the last rib, extending from the tip of this rib anteriorly, to almost as far posteriorly as the spine. The incision was carried through the skin, subcutaneous tissue, deep fascia and muscles down to the peritoneum, which was not incised; instead, it was gently pushed forward and medially, away from the posterolateral wall of the abdomen, so as to expose the crus of the diaphragm on that side. The splanchnic nerves were seen emerging from the posterolateral as-

Fig. 28.—Pacinian corpuscle somewhere near the middle of the body of the pancreas (site indicated by arrows). The degenerating nerve fiber below was traced on serial sections approaching the pacinian corpuscle. Splanchnicectomy had been done on the left side. (× 80.)

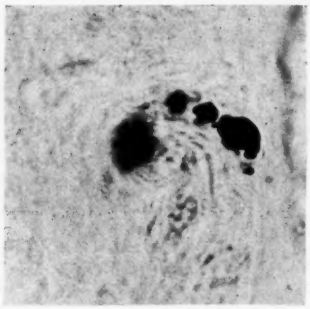

Fig. 29. — Degenerating nerves on cross section in the tail of the pancreas after splanchnicectomy on the left. (× 400.)

pect of the crus and turning anteriorly and medially toward the celiac plexus. A segment of these nerves was cut out, and the wound was closed in layers with cotton sutures.

The pancreases of 3 cats splanchnicectomized on the right and those of 3 others splanchnicectomized on the left were stained according to Swank and Davenport's modification of the Marchi method (Swank and Davenport,[28] 1935), a procedure by means of which the products of myelin degeneration stain black against a yellowish background. This technic was chosen because it is suitable for tracing degenerating myelinated nerves, and according to Kuntz[26a] (1945) all sensory nerves to the pancreas are myelinated. According to Young[29] (1942), myelin degeneration begins on the first day, and all fibers are affected during the first week. It should be realized, however, that removal of the degenerated myelin is a rather slow process which is carried by the macrophages over a long period. According to Swank and Davenport,[28] the optimum results from staining degenerated myelinated fibers in the cat are obtained at any time between the fourteenth and twentieth day after section of the nerve. Consequently, all 6 cats whose pancreases were going to be stained by Swank and Davenport's technic were killed at various intervals between the fourteenth and twentieth postoperative days. Each animal was deeply anesthetized with pentobarbital sodium intraperitoneally, the thoracic cavity was opened, a cannula was inserted into the left ventricle, the inferior vena cava was opened, and the animal was perfused with an aqueous solution of 5 per cent anhydrous magnesium sulfate and 2.5 per cent potassium dichromate. This preparatory step, according to Swank and Davenport,[28] increases the staining tendency of the degenerating myelin. The pancreases were then removed from the animals, placed in 10 per cent solution of formaldehyde and left there for forty-eight hours. After the pancreases were removed from the animals, the splanchnic nerves on the operative side were carefully dissected in order to make sure that these nerves had been adequately sectioned. At the end of forty-eight hours the pancreases were removed from the formaldehyde, and, with the aid of an

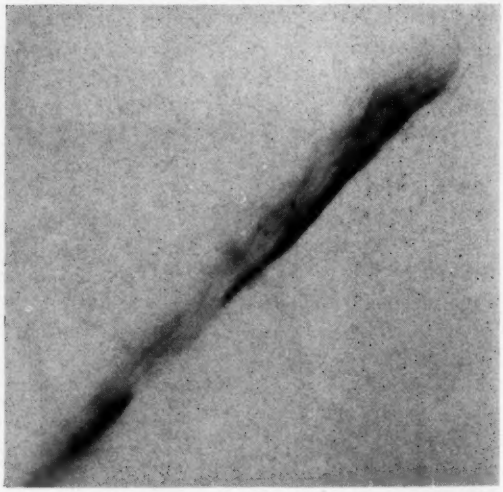

Fig. 30. — Photomicrograph showing a single large normal sensory fiber within a nerve trunk stained with silver. (× 400.)

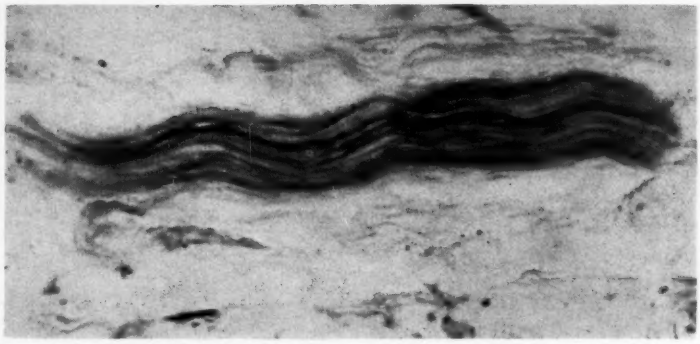

Fig. 31.—Another photomicrograph of a nerve trunk showing normal fibers stained with silver. Near the center of the trunk a larger, normal, sensory fiber is visible. (× 400.)

electric needle, the anterior surface of each organ was marked with a shallow longitudinal line, so that this surface could be identified on the microscopic cross sections. Each pancreas was then cut transversely into serial blocks 3 mm. in thickness. Each one of these blocks was then placed in a small embedding bag with a tag identifying the part of the pancreas from which that block had been taken, the number of each block, and the kind of operation that had been done on that animal. From this point in the experiment the technic of Swank and Davenport was followed, and representative sections, each 40 microns in thickness, were cut serially out of each block for microscopic study.

The pancreases of the 2 remaining cats, one with a right splanchnicectomy and the other with a left splanchnicectomy, were

Fig. 32.—Degenerating sensory fiber (indicated by arrow) within a nerve trunk stained with silver. (× 400.)

Fig. 33. — Photomicrograph showing a nerve trunk containing several degenerating sensory fibers stained with silver. (× 400.)

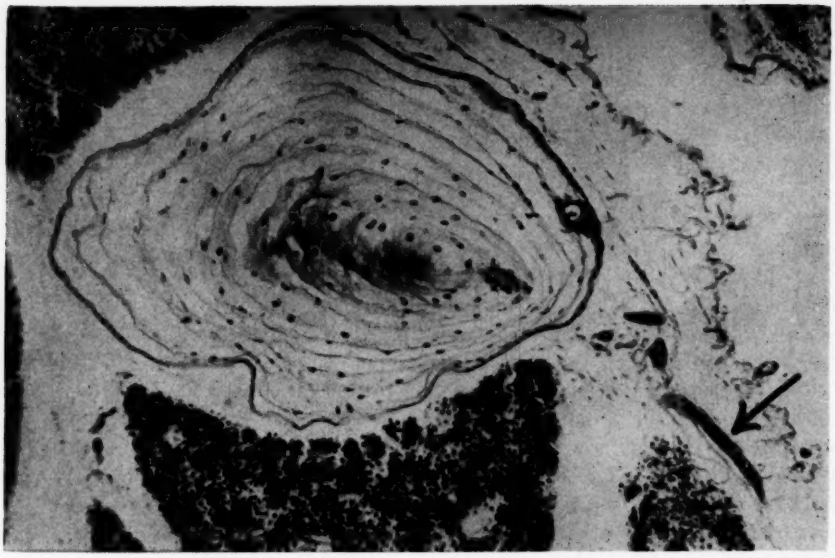

Fig. 34.—Photomicrograph showing a large pacinian corpuscle; arrow points to its degenerating nerve fiber, stained with silver. (× 80.)

stained with a silver technic so as to obtain some of the details that cannot be observed by the Marchi technic. The silver staining of nerve axons is suitable for the study of normal nerve tissue, but according to Glees[30] (1946) and Feindel[31] (1948) the silver method can also be used for the study of degenerating axons if an adequate amount of time is allowed for signs of degeneration to appear. According to Young[29] (1942), the breaking up of the axons begins on the second day; possibly all fibers show abnormalities forty-eight hours after section of a nerve, and by the tenth day probably most of the fibers become obviously abnormal. According to Feindel,[31] the optimum time to detect degeneration of axons with the silver technic is at sometime between the fourth and the seventh day after section of the nerve. Therefore, these 2 cats were killed on the sixth postoperative day, and perfused with 10 per cent neutral solution of formaldehyde as advised by Holmes[32a] (1943), by a technic similar to the one described for the other cats. The pancreases were then removed and placed in separate containers filled with 10 per cent neutral solution of formaldehyde; after approximately three weeks, the anterior surface of each pancreas was marked with an electric needle as was done with the other pancreases. The entire organ was divided into blocks about 1 to 1.5 cm. in thickness, and each block was placed in an embedding bag with a tag indicating the number of the block, the part of the pancreas from which that block was taken, and the kind of operation that had been done on that animal. A representative number of serial sections, each one 15 microns in thickness, were cut from each block of tissue. The sections were then mounted on slides by albuminization according to the technic described by Holmes[32b] (1942). Once the sections were mounted, they were stained by the technic outlined by Holmes[32c] (1947).

On the human pancreas the technic of Swank and Davenport[28] was used; blocks 3 mm. in thickness were cut out of the uncinate process, head, neck, body and tail of the organ, and stained with the Swank and Davenport modification of the Marchi technic.

At least five serial sections, each 40 microns in thickness, were cut out of each 3 mm. block in the preparations stained by the modified Marchi technic. Twice as many serial sections, each 15 microns thick, were cut out of each one of the thicker blocks stained with the silver technic. All the microscopic sections were examined with the aid of the low power and the high dry power objective lenses of the microscope. The oil immersion objective was used in the study and identification of the finely myelinated nerve fibers.

With regard to examination of the microscopic sections, the nerve fibers were identified as such only when they could be traced serially. Any nerve fiber, normal or degenerated, was regarded as doubtful if it could not be traced on serial sections.

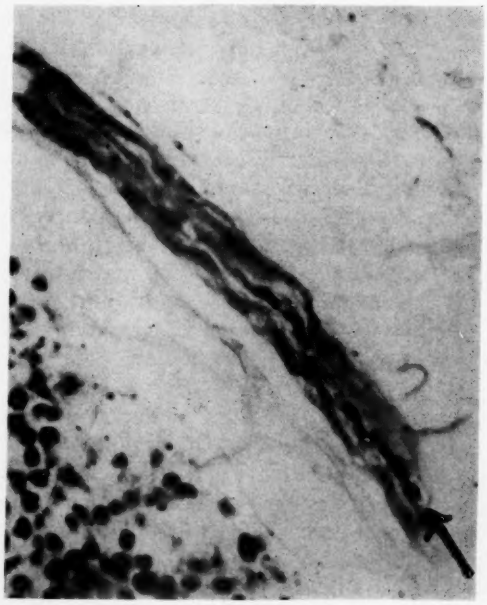

Fig. 35.—Higher magnification of the degenerating nerve fiber supplying the pacinian corpuscle shown in Figure 34. (× 400.)

Results.—No difficulties were encountered in the identification of degenerating myelinated nerves in the preparations stained by Swank and Davenport's technic. Particles of fat or fat cells that picked up the stain were practically the only type of artefact observed in these preparations, but the smooth, regular outline of the fat globules which stained with an even black, and, most important of all, the absence of normal nervous tissue in the immediate surroundings of the black areas, made it rather easy to distinguish this type of artefact from actual degenerating nerves (Figs. 2, 3, 4 and 5). Another difficulty encountered at the beginning of this investigation was to differentiate between normal nerve fibers and regular connective tissue fibers, both of which stained light yellow. However, the presence of epineurium, the compactness of the fibers, and the directional arrangement of the fibers in the nerve trunks, all served as criteria in this differentiation (Fig. 1). Occasionally another type of artefact was encountered, shaped like a nerve fiber, and stained black. Sometimes it was difficult to decide whether this was an artefact or a degenerating myelinated fiber (Fig. 6). Tracing the fibers on serial sections and looking for the presence or absence of fragmentation of the myelin was very helpful in deciding whether the structure in question was actually a nerve fiber or not. The black fiber on Fig. 6 could not be found on the next serial section, and it does not show any fragmentation, whereas all degenerating fibers should show at least some evidence of fragmentation fourteen days after the nerves have been severed.

Degenerating myelinated fibers were

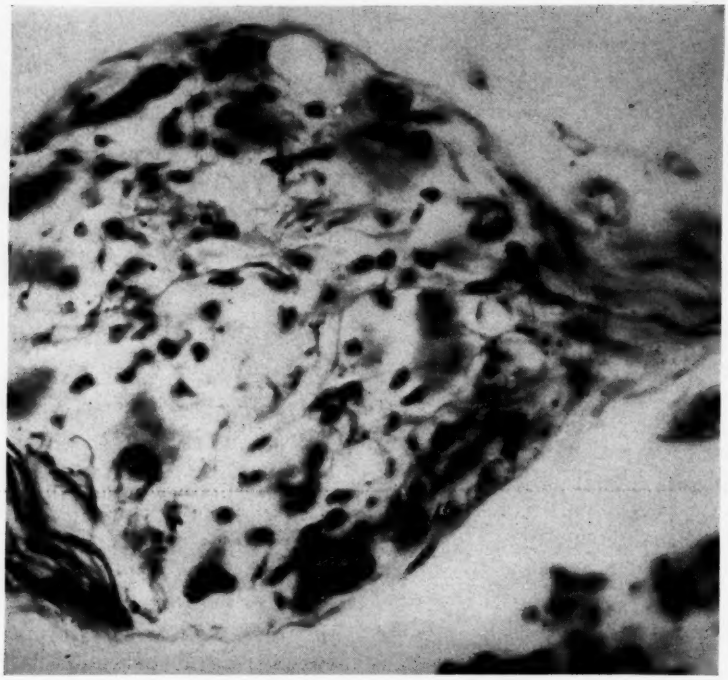

Fig. 36. — Photomicrograph showing an intrinsic pancreatic ganglion stained with silver. (× 400.)

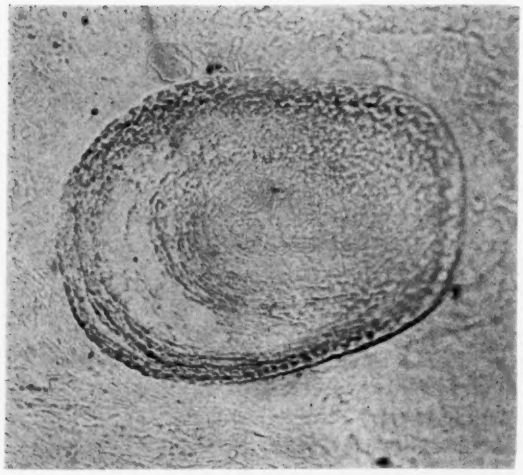

Fig. 37.—Photomicrograph showing pacinian corpuscle in the *human* pancreas (modified Marchi stain). (× 80.)

observed in every part of the cat's pancreas after either left or right splanchnicectomy. There was no evidence of segmental distribution within the pancreas of degenerating fibers from the right and left splanchnics. Fibers from the right or left splanchnics were present in the region of the uncinate process and in the head, neck, body and tail of the pancreas, and they were distributed on the anterior as well as on the posterior surfaces, and also near the center of the organ. Degenerating myelinated fibers were also observed in every part of the *human* pancreas after right splanchnicectomy. In the cat, the big nerve trunks and the heavy myelinated degenerating fibers were more numerous in the regions of the head, neck and first part of the body, but as the re-

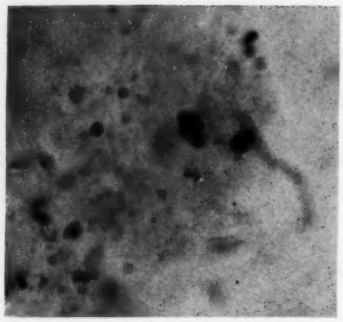

Fig. 38. — Photomicrograph showing degenerating myelinated nerves in the head of the *human* pancreas after right splanchnicectomy (modified Marchi stain). (× 900.)

gion of the tail was approached they became scarcer, and the finely myelinated fibers appeared to predominate in this region. In the human pancreas, finely myelinated degenerating fibers predominated in every part of this organ.

Figures 7 through 16 are photomicrographs of degenerating myelinated fibers in different parts of one pancreas after right splanchnicectomy. In all the animals on which right splanchnicectomy was done the results were essentially the same.

Figures 17 through 29 are photomicrographs of degenerating myelinated fibers in different parts of another pancreas after left splanchnicectomy. The observations were identical in all the pancreases of animals on which left splanchnicectomy was done.

Figures 12 and 16 and Figures 20, 21 and 22 are shown to demonstrate that there is no segmental distribution between the sensory nerves from the right and left splanchnics with regard to the anterior and posterior surfaces of the pancreas.

Figures 30 through 36 are shown to illustrate the contrast between normal and degenerating nerve fibers stained by the silver technic of Holmes. The even outline of the normal fibers can be seen in Figures 30 and 31, whereas the broken-up appearance of degenerating fibers is shown in Figures 32-35. By this technic one is also able to show the contrast between the fine nonmyelinated nerves and the much heavier axons of sensory fibers. By the silver technic the degenerating sensory nerves could be demonstrated in all parts of the pancreas after either right or left splanchnicectomy.

Figures 38 through 41 are illustrations of degenerating myelinated nerves in differ-

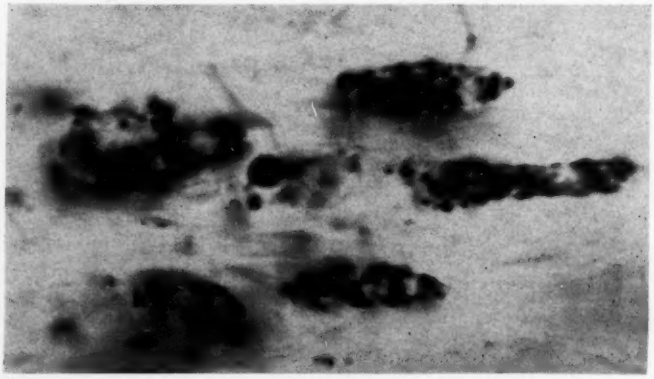

Fig. 39.—Photomicrograph showing groups of degenerating myelinated nerves in the neck of the *human* pancreas after right splanchnicectomy (modified Marchi stain; × 900).

Fig. 40.—Photomicrograph showing groups of degenerating myelinated nerves in the body of the *human* pancreas after right splanchnicectomy (modified Marchi stain; × 900).

ent parts of the human pancreas after unilateral (right) splanchnicectomy, stained by Swank and Davenport's modification of the Marchi technic.

Conclusions.— According to Richins[24] (1945), all sensory fibers to the pancreas reach this organ via the splanchnic nerves, which contain, in addition to these visceral afferents, the preganglionic sympathetic fibers that terminate by synapsing in the celiac ganglia. According to this, when the splanchnics are cut between the diaphragm and the celiac plexus, as was done in the present experiments, only sensory nerves can be expected to show evidence of degeneration within the pancreas. Therefore all the degenerated fibers observed in these preparations are sensory nerves. Consequently, whenever complete sensory denervation is desired, either of one region of the pancreas or of the entire organ, interruption of the impulses along the splanchnic nerves will have to be done bilaterally. If a temporary effect is desired, bilateral infiltration of the splanchnic nerves with procaine hydrochloride is necessary, whereas if a permanent effect is to be obtained, bilateral splanchnicectomy is indicated.

Alleviation of pain in patients with pancreatic disorders, treated by unilateral interruption of impulses along the splanchnic nerves, must be due to diminution in the number of functioning sensory fibers to the pancreas. As reported by Bingham, Ingelfinger and Smithwick[33] (1949), the pain threshold is elevated in the human pancreas after unilateral sympathectomy, and almost double the amount of pain stimulus is required after sympathectomy as is needed before the operation. They concluded that "these observations explain why unilateral sympathectomy sometimes relieves visceral pain arising from a bilaterally innervated organ."

The recurrence of pain reported as taking place in some patients after unilateral interruption of impulses in the splanchnic nerves is explained on the basis of incomplete sensory denervation of any region of the pancreas. Also, from the results of these experiments it seems logical to assume that if the distribution of the sensory nerves within the *human* pancreas is similar to the distribution of sensory fibers within the cat's pancreas, there is also similarity in the distribution of other

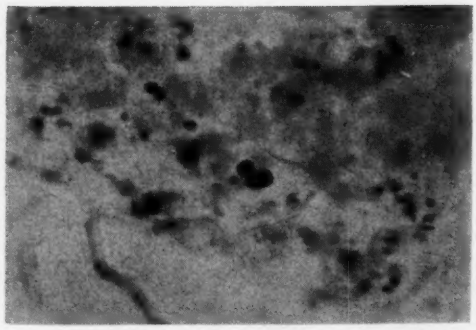

Fig. 41.—Photomicrograph showing degenerating finely myelinated nerves in the tail of the *human* pancreas after right splanchnicectomy (modified Marchi stain; × 900).

types of nerves in the pancreases of man and cat.

SUMMARY

1. The object of the present investigation was to determine the distribution of sensory fibers from the right and left splanchnic nerves within the pancreas, so as to assist the surgeon in deciding on an adequate surgical approach for patients in whom sensory denervation of the pancreas is desired.

2. The literature on the innervation of the pancreas is reviewed, with emphasis on the anatomic distribution and functional characteristics of these nerves.

3. The pancreases of 8 cats and 1 child were examined. It was observed that the sensory nerves were distributed throughout the organ, with no evidence of any differential segmental distribution of fibers from the right and left splanchnics.

4. It is concluded that bilateral interruption of impulses along the splanchnic nerves is necessary if complete sensory denervation of any region of the pancreas is desired.

Author's Note: I would like to express my sincere appreciation to Drs. Harold Cummins, Adrian Reed and Homer Kirgis for their kind assistance and encouragement while this work was being done and for making available material and facilities to conduct the experiments.

ZUSAMMENFASSUNG

1. Die vorliegende Untersuchung hatte zum Ziel, das Ausbreitungsgebiet der sensiblen Fasern des rechten und linken Splanchnikusnerven innerhalb des Bauchspeicheldrüse zu bestimmen, um dem Chirurgen, der an einer Entfernung der sensiblen Nerven des Pamkreas interessiert ist, die Wahl eines geeigneten Zugangsweges zu erleichtern.

2. Es wird ein Überblick der Literatur über die Nervenversorgung der Bauchspeicheldrüse gegeben und besonders auf die anatomische Verteilung und die funktionellen Eigenschaften dieser Nerven hingewiesen.

3. Die Bauchspeicheldrüsen von acht Katzen und eines Kindes wurden untersucht. Es wurde festgestellt, dass die sensiblen Nerven sich über das ganze Organ ausbreiten, ohne dass sich irgendwelche segmentären Verzweigungen der Fasern vom rechten oder linken Splanchnikus nachweisen liessen.

4. Die Schlussfolgerung ist, dass zur völligen sensiblen Entnervung irgendeines Abschnittes der Bauchspeicheldrüse die beiderseitige Unterbrechung der Impulse im Verlaufe der Splanchnikusnerven notwendig ist.

SUMARIO

1. O objetivo desta investigação foi determinar a distribuição de fibras sensitivas dos nervos esplâncnicos direito e esquerdo dentro do pâncreas, de maneira a auxiliar o cirurgião quanto ao acesso em pacientes em que se deseja desnervação sensitiva do pâncreas.

2. É feita uma revisão da literatura referente à inervação do pâncreas, com ênfase na distribuição anatômica e característicos funcionais dêates nervos.

3. Foram examinados os pâncreas de 8 gatos e uma criança. Observou-se que os nervos sensitivos distribuiam-se por todo o órgão, sem qualquer evidência de distribuição segmentar diferencial de fibras dos esplâncnicos direito ou esquerdo.

4. Concluiu-se ser necessária a interrupção bilateral de impulsos ao longo dos nervos esplâncnicos, caso se pretenda obter desnervação sensitiva completa de qualquer região do pâncreas.

7. É apresentado um caso de polipos inflamatórios fibróides do intestino grosso. Trata-se do primeiro caso da literatura e, pelas razões mencionadas, torna-se aparente seu significado na cirurgia geral.

RÉSUMÉ

1. L'investigation présente a pour objet de déterminer la distribution des fibers sensorielles, issues des nerfs splanchniques droit et gauche, dans le pancréas de manière à permettre au chirurgien de prendre une décision, sur la base d'un essai chirurgical adéquat, concernant des malades chez lesquels l'énervation sensorielle du pancréas est désirée.

2. La littérature sur l'innervation du pancréas est passée en revue, avec accent sur la distribution anatomique et les caractéristiques fonctionnelles de ces nerfs.

3. Les pancréas de 8 chats et un enfant furent examinés. Il fut observé que les nerfs sensoriels étaient distribués dans tout l'organe, sans aucune preuve d'une distribution segmentaire différentielle quelconque des fibres issues des splanchniques droit et gauche.

4. Il est conclu que l'interruption bilatérale des influx le long des nerfs splanchniques est nécessaire si l'on désire l'énervation sensorielle complète d'une région quelconque du pancréas.

RIASSUNTO

1. Scopo della presente ricerca fu di determinare la distribuzione delle fibre sensoriali d'orgine splancnica nella compagine del pancreas, per dar modo al chirurgo di decidere un opportuno piano operatorio allorchè si accinga ad eseguire una denervazione pancreatica.

2. Viene passata in rassegna la Letteratura sull'innervazione del pancreas, specie dal punto di vista della distribuzione anatomica e dei caratteri funzionali.

3. Furono esaminati i pancreas di 8 gatti e di 1 bambino. Fu così possibile osservare che i nervi sensoriali decorrevano nella compagine dell'organo senza alcuna distribuzione segmentaria delle fibre provenienti dallo splancnico di destra e di sinistra.

4. Se ne può trarre la conclusione che, quando si voglia ottenere una denervazione completa di qualsiasi segmento del pancréas, è necessario procedere all'interruzione degli impulsi su ambedue gli splancnici.

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The man who has no refuge in himself, who lives, so to speak, in his front rooms, in the outer whirlwind of things and opinions, is not properly speaking a personality at all; he is not distinct, free, original, a cause—in a word, *some one.* He is one of the crowd, a taxpayer, an elector, an anonymity, but not a man.

—*Amiel*

Inflammatory Fibroid Polyp of Large Intestine

Report of a Case

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AND
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CLINICAL studies on the subject of polyps of the large intestine have resulted in numerous published articles covering the many aspects of the subject. The clinical significance lies in the intimate relation of polyps to carcinoma. Most authorities[1] agree that a polyp in the large intestine is a signal of danger, for, regardless of the picture presented by the microscopic section of a polyp, the potentiality of malignant change exists. It is also generally accepted that a colon in which polyps are prone to form is also a colon in which carcinoma is prone to form. Swinton[2] summarized the relationship of polyps to carcinoma with the following general statements, which have been emphasized in the literature: "(1) Benign mucosal polyps of the rectum and colon occur in both sexes, slightly more common in males than in females and at all ages. They occur with increasing frequency in the older age groups. (2) Polyps are frequently multiple and are found in our experience in approximately 25 per cent of all surgical specimens removed for cancer of these organs. (3) There is a definite similarity between the age incidence and location of benign mucosal polyps and of malignant disease of the colon and rectum. (4) All stages between benign mucosal polyps and carcinoma of the colon and rectum can be demonstrated histologically. (5) Benign mucosal polyps are true tumors and must be considered as pre-malignant lesions. They are the result of some inherent defect in cellular growth and not the result of an inflammatory process. (6) A high percentage of the malignant lesions of the colon and rectum originate in pre-existing benign mucosal polyps." In a series of 246 cases, Judd and Carlisle[1] observed a 15 per cent incidence of multiple polyps exhibiting a definite trend toward eventual recurrence.

Polyps are tumors arising from the mucous membrane, in this instance of the colon and rectum. They may be sessile or pedunculated, and the majority are adenomas. Helwig,[3] in a series of 1,460 consecutive autopsies, listed the types of polyps observed in order of frequency: 1. Adenoma; most common; most frequent site, the sigmoid portion of the colon. 2. Lipoma; most common site, the cecum and the ascending portion of the colon. 3. Leiomyoma; uncommon. 4. Carcinoid; infrequent. Swinton has repeatedly brought out the fact that the papillary type of adenoma demands special attention because it is a tumor of the mucosal surface with secondary glandular changes, a tendency to spread laterally and an inevitable

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tendency to recur unless some type of resection is performed. These facts, indelibly imprinted on the physician's mind, will alert him to the obvious importance of detection of the disease and its proper treatment. Careful digital examinations of the rectum, sigmoidoscopic examination and roentgenographic studies performed with diligence will detect these tumors in the majority of cases. Gianturco and Miller,[4] in their program for the detection of colonic and rectal polyps, reported 14 cases of early and curable carcinoma of the colon in 4,851 visual and roentgen examinations. They concluded that such an investigative program should lead to the discovery of polyps in 10 to 15 per cent of adult patients, regardless of symptoms.

In the process of reviewing the literature on polyps of the large intestine, a diligent search was also considered for any published report on inflammatory fibroid polyp of the large bowel; however, a personal search, one by the Armed Forces Library and an inquiry from Dr. E. B. Helwig of AFIP failed to produce any such article or case report. Helwig and Ranier[5] have published an article on inflammatory fibroid polyps of the stomach. Since the lesion in the case report herein was basically similar to that described by Helwig and Ranier, their data must necessarily be presented. In their series of 10 cases the polyps were classified as adenomatous and nonadenomatous. The gross features were as follows:

1. The polyps were chiefly submucosal.

2. The base of each polyp was located above the muscularis mucosa and extended into the submucosa.

3. Most of the polyps were sessile, few pedunculated. They ranged from 1 to 5 cm. in diameter.

4. The polyps were covered with mucosa continuous with that of the gastric wall.

5. They were soft or rubbery and at operation were observed to be fixed to the mucosa; the cut surface was grayish white.

The microscopic features were as follows:

1. Fibroblastic, reticular and fibrillar connective tissue was observed, disposed as loose threadlike fibrils, irregularly arranged in parallel rows or in concentric pattern about the blood vessels, which varied in size and mural thickness. In the hematoxylin and eosin preparations the fibrils were often separated by small, clear spaces.

2. There was a moderate, dense inflammatory infiltrate of eosinophilic leukocytes distributed throughout the polyp.

The cause of the lesion is not known; hence, the descriptive title is most satisfactory. The adjective "inflammatory" denotes its inflammatory character and "fibroid" its fibrous characteristics. That the lesion is not neoplastic is evidenced by the splitting and fraying rather than by the pushing aside of bundles of hypertrophied muscularis mucosa.

REPORT OF CASE

A white man 37 years old was admitted to the hospital on Oct. 5, 1953, with a history of anorexia and loss of 29 pounds (13.2 Kg.) in weight during the six weeks prior to admission. His original weight, 208 pounds (94.3 Kg.) had fallen to 170 pounds (77.1 Kg.). He stated that during the four weeks prior to admission he had passed two or three loose, light-colored stools daily. Defecation was preceded by griping pain in the lower part of the abdomen, and the pain was relieved by the bowel movement. The pain was epigastric, with radiation to the back, but was not accompanied by nausea or vomiting. The pain in the back occurred every fifteen minutes and was relieved by assuming the knee-chest position.

The past history revealed that the patient had consumed 1 quart of whiskey, beer and wine per week from the age of 14 to 1945 and had smoked 40 cigarettes a day until the onset of the present illness. He had used milk

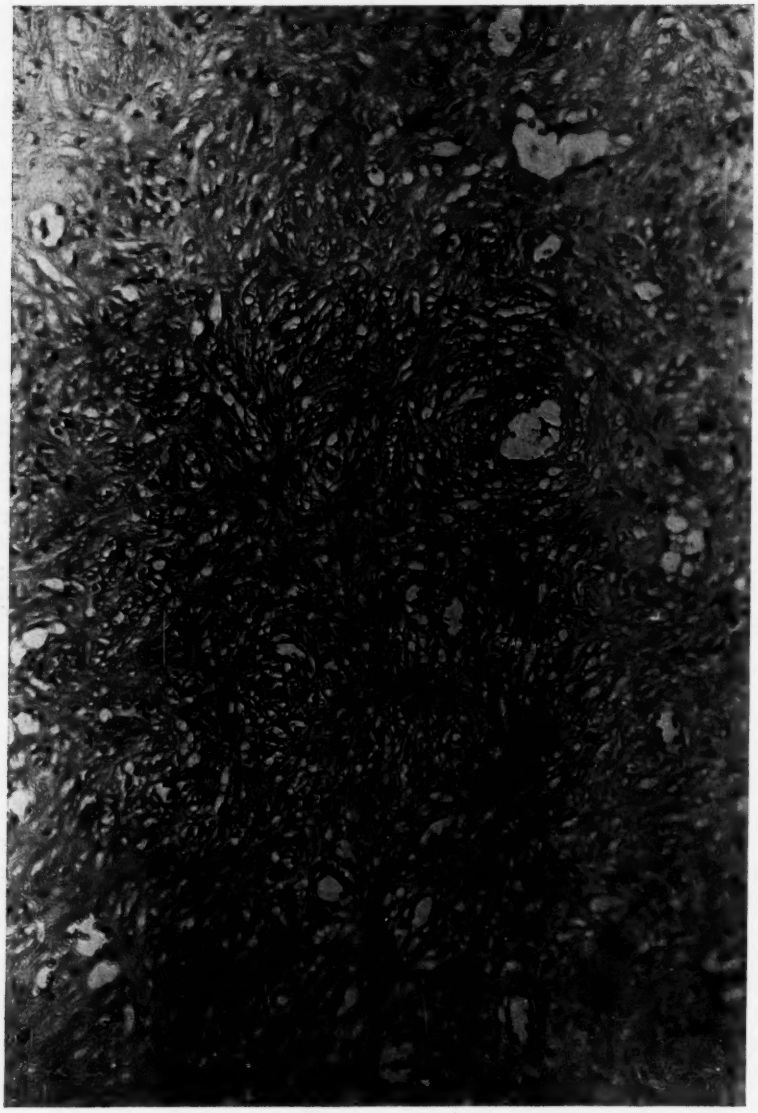

Fig. 1.—Section of tumor showing moderate degree of cellularity. The cells, for the most part, are spindle shaped. The fibroblastic and connective tissue is coarse and there is tendency to form whorls. There are moderate numbers of small blood vessels, varying in size and surrounded by thickened hyaline coats. There are many vacuoles of various sizes adjacent to the cells. Hemotoxylin and eosin, × 150.

of magnesia for constipation, "Tums" for heartburn and headache powders as needed. In childhood he had had "stomach trouble" but was not able to give any specific details. The family history and a systemic review were noncontributory.

Physical examination on admission revealed the obvious loss of much weight. The signifi-

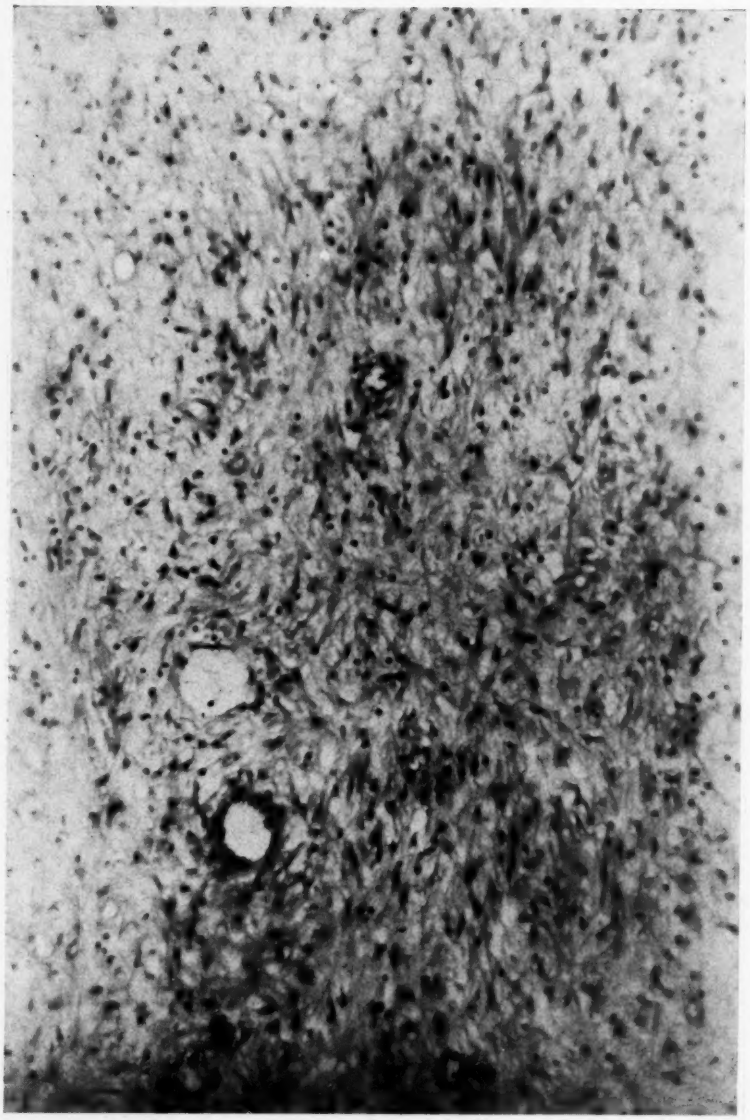

Fig. 2.—Another section of the tumor. This section shows rather scant cellularity, with inflammatory cells and prominence of vacuolization of the intercellular substance. There are three small blood vessels of different size, with varying thickness of the walls. The fine fibrillar connective tissue has no definite pattern. Hemotoxylin and eosin, × 150.

cant observations were hypertrophied tonsils and partial atrophy of the left testis. The abdomen presented no significant abnormalities.

He was admitted to the Medical Service and was given a G. I. No. 2 diet. Numerous laboratory and roentgen studies were then carried out. During that time the patient's temperature varied, reaching a maximum of 102 F., with daily remission to 99 F., and the pulse

rate ranged between 80 and 120. The maximum temperature was noted between the hours of 4 and 8 p. m. Of the numerous laboratory studies, the significant ones gave the following results:

Repeated complete blood counts showed 15,000 to 23,200 leukocytes per cubic millimeter, with a differential count shifting to the left. There were approximately 4,300,000 erythrocytes per cubic millimeter, with the value for hemoglobin fluctuating between 12 and 9.5 Gm. The hematocrit reading varies from 41 to 39, the sedimentation rate from 38 to 34 and the platelet count from 480,000 to 390,000.

Fig. 3.—Section of one of the glands in the mesentery, showing reactive hyperplasia. Hemotoxylin and eosin, × 150.

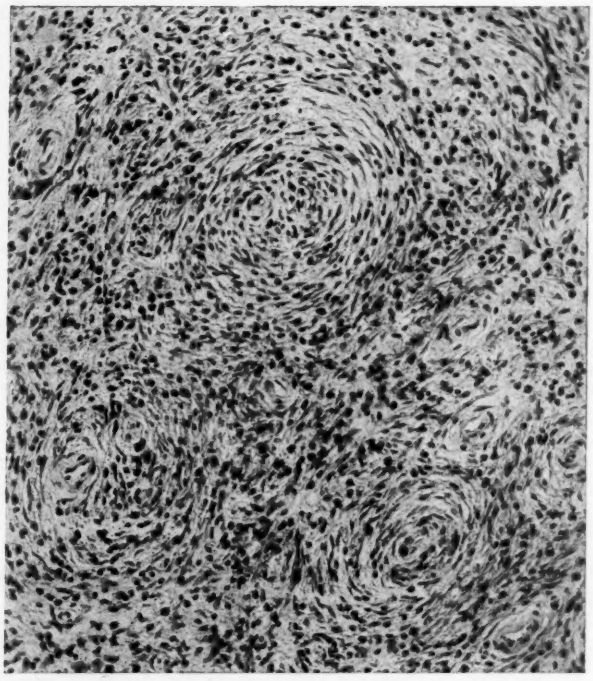

Fig. 4 (Case 1).—Fine fibrillar connective tissue disposed concentrically about small blood vessels, producing an onion skin effect. Eosinophilic leukocytes are scattered throughout. Hemotoxylin and eosin, × 145. (AFIP Acc. 297945, Neg. No. 20-3-1, reproduced and published by permission of the Armed Forces Institute of Pathology, Washington 25, D. C.)

Repeated chemical studies of the blood showed an alkaline phosphatase level ranging from 7 to 16 (base of prism up). The value for nonprotein nitrogen and the albumin-globulin ratio were normal. Liver tests for serum bilirubin revealed the following values: direct, 0.195; indirect, 0.912. Cephalin flocculation ranged from negative to 1 plus. Bromsulphalin tests showed 20 to 30 per cent retention. The prothrombin time was increased (control 14, patient 21). Urinalyses, gastric analysis, serum amylase tests, five tests of the feces for ova and parasites, three cultures of feces for pathogens, two blood cultures and agglutination tests for rare fevers all gave negative results.

Roentgenograms of the gallbladder and a gastrointestinal series were normal. A barium enema with air contrast showed an obstruction or delay of flow of barium at the hepatic flexure. The transverse portion of the colon was dilated, and its haustrations were decreased. There was a filling defect 7.5 by 9 cm., which appeared to be in the right half of the transverse portion of the colon. Distended loops of small bowel were noted in the right midabdomen and in the region of the cecum.

During the course of these studies the patient was examined by various members of the staff. On about the twelfth hospital day an abdominal mass was palpable above the umbilicus. The mass could be shifted by palpation. The patient complained of some abdominal distress at times, but the most significant observations were persistent loss of weight and elevation of temperature. With the palpation of an abdominal mass, the consensus was that a malignant neoplasm was present, and because of the elevated value for serum bilirubin the diagnosis of carcinoma of the head of the pancreas was considered. On further review of the roentgenograms, however,

the preoperative impression was that of carcinoma of the hepatic flexure of the colon. The patient was transferred to the Surgical Service on November 24 for exploratory celiotomy with indicated surgical treatment. In reviewing the record to that date, the persistent elevated temperature and the increasing leukocytosis impressed one of us (R.E.V.) as due to an inflammatory process, which was believed to be secondary to the malignant lesion. Since the patient had not received any antibiotic, he was given 300,000 units of crysticillin daily and 250 mg. of terramycin every six hours, starting on November 27. Within twenty-four hours the temperature dropped to the normal level, where it remained until the day of operation.

On December 1 an exploratory celiotomy was done, with the patient under general anesthesia. The operative observations were as follows: The cecum contained a round, stony hard mass the size of a baseball, which was attached to a flat pedicle originating from the medial wall of the cecum just above the ileocecal valve. This mass was freely movable on the pedicle within the lumen of the cecum. The mesentery of the cecum and ascending colon contained several palpable, rubbery nodes varying in size from that of a pea to that of a filbert. It was our impression that this was a malignant lesion, and a right hemicolectomy with end-to-end anastamosis was done. Except for a postoperative subcutaneous wound infection, the course was uneventful. The patient showed a good appetite, and gained in weight. A complete blood count on the day before discharge from the hospital was normal.

Gross Specimen.—The specimen consisted of a segment of intestine in continuity. This included 10 cm. of the terminal portion of the ileum and 22 cm. of the colon from the ileoce-

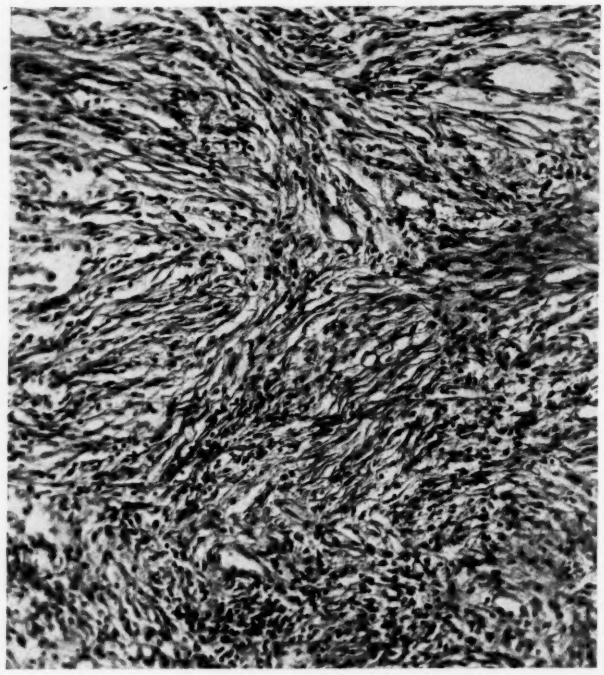

Fig. 5 (Case 5).—The fibrillar connective tissue is relatively coarse and it is arranged irregularly rather than concentrically about the blood vessels. Hemotoxylin and eosin, × 110. (AFIP Acc. 28664, Neg. No. 31-3-3. Reproduced and published by permission of the Armed Forces Institute of Pathology, Washington 25, D. C.)

cal valve. The specimen was opened; situated in the cecum, at the margin of the ileocecal valve, there was a globular mass 6.5 cm. in diameter, pedunculated by a short, thick stalk 2.5 cm. in length and 3 cm. in diameter. The stalk was covered with mucosa. The globular mass did not appear to be covered by mucosa. The surface was smooth, in most places pinkish-white and in several places mottled green. The cut surface was smooth, flat and white. It was rubbery but hard and did not extend into the short stalk. The retrocecal fat contained eight large lymph nodes varying in diameter from 1 to 2 cm. Some of these nodes were also present in the mesentery of the terminal portion of the ileum. They were firm and rubbery and on section bulging, pale and pinkish-gray.

Microscopic Observations.—The tumor was loosely cellular in many places, without any particular pattern, and in many other places seemed to form incomplete and abortive whorls. The cells for the most part were spindle-shaped, although there was variation in shapes. Slight to moderate anisocytosis was noted. The nuclei varied from slender to plump, with nucleoli and fine chromatin. The cytoplasm of the cells was indistinct, but where it could be visualized it was eosinophilic, fibrillar and suggestive of vacuole formation. Adjacent to many of the cells were vacuoles of various sizes. In some places the cells surrounding the vacuoles gave the semblance of formation of a bizarre capillary. The intercellular substance varied. In some places it consisted of hyaline strands and in others of eosinophilic fibrils that varied in thickness. In some parts the cellularity was scant and vacuolization of the intercellular substance prominent. Moderate numbers of small blood vessels were surrounded by thickened hyaline coats. The surface of the tumor presented necrosis and infiltration with polymorphs. *Trichrome stain* revealed the presence of tiny, delicate fibrillar processes from some of the tumor cells. The cell bodies were indistinctly stained, and some of them were green, while others were pale reddish. In most of the intercellular substances the fibrils were green. *Mucicarmine stain* did not reveal any mucin. *Scharlach R* revealed no fat. Polarization did not reveal any anisotropic substance. A section through the stalk of the tumor did not reveal any tumor tissue. Multiple sections of the regional lymph nodes did not show any neoplastic or metastatic deposits. They revealed reactive hyperplasia. The microscopic sections were reviewed by Dr. E. B. Helwig of AFIP, who, by personal communication on December 16, reported that the lesion appeared basically similar to the inflammatory fibroid polyp of the stomach aforedescribed and therefore diagnosed the tumor as an inflammatory fibroid polyp. The similarity of the microscopic data in this case and in those reported by Drs. Helwig and Ranier are more obvious if one views the sections through the microscope as shown by Figs. 1, 2 and 3 of the case report and Figs. 4 and 5 from a paper by Helwig and Ranier.[5]

COMMENT

The clinical features of rapid loss of weight, 2 to 3 daily loose bowel movements, pain in the lower part of the abdomen, palpable abdominal mass, a filling defect in the large bowel on roentgen examination and the results of laboratory tests obviously led to a clinical diagnosis of malignant disease of the large bowel. The operative observations were reasonably interpreted as indicating a malignant growth of the ascending colon. The elevated temperature, with daily remissions, was attributed to secondary degeneration of the malignant lesion. Therefore the operative treatment, which consisted of right hemicolectomy with primary anastamosis logically followed as the treatment of choice. After the pathological diagnosis had been made, the inflammatory process proved to be more important than it had been considered.

Questions may arise as to the type of surgical treatment suited to such a tumor. Is extensive resection, such as was done in this case, or simple resection of the lesion indicated? Helwig and Ranier, in their paper on such lesions of the stomach, reported that 4 were removed by subtotal gastrectomy and 3 by resection, and that there were no deaths due to a recurrence of the gastric lesion. They advised establishing the diagnosis by frozen sections and resecting the polyp, if inflammatory, rather than performing a more serious and

extensive operation. It may well be that this advice can be applied to inflammatory fibroid polyps of the large bowel measuring 1 to 3 cm. in diameter if frozen section facilities are available to establish the diagnosis. It is our firm conviction, however, that, for tumors of the size and location described in our case report, extensive resection is the treatment of choice. A thorough review of the surgical literature has failed to reveal reports of this type of tumor of the large bowel. Consequently, this diagnosis was not considered preoperatively. The preoperative diagnosis of this type of tumor is certainly remote, because the clinical manifestations are common with those of other and more frequent lesions of the large bowel. Since polyps of the large bowel are detected more often with present-day facilities, this type must be added to those that have been recorded.

SUMMARY

The authors conclude that: 1. Polyps are true tumors arising from mucous membrane.

2. Polyps of the large bowel occur with increasing frequency. They are frequently multiple, may be sessile or pedunculated and may recur.

3. Carcinoma has developed in a fairly high percentage, hence, polyps of the large bowel are considered premalignant.

4. Polyps of the large bowel are clinically significant, therefore, because of their close relation to carcinoma.

5. With present-day facilities, these polyps are detected oftener than in the past.

6. A report, *Inflammatory Fibroid Polyps of Stomach*, by Helwig and others, is reviewed.

7. A case is reported of inflammatory fibroid polyps of the large bowel. This is the first case to appear in the literature, and, for the aforementioned reasons, its significance in general surgery becomes apparent.

ZUSAMMENFASSUNG

Die Verfasser gelangen zu folgenden Schlussfolgerungen:

1. Polypen sind echte von der Schleimhaut entspringende Geschwülste.

2. Polypen des Dickdarms gelangen mit zunehmender Häufigkeit zur Beobachtung. Sie treten oft in der Mehrzahl auf, können sesshaft oder gestielt sein und können Rückfälle aufweisen.

3. Krebse entwickeln sich in einem ziemlich hohen Prozentsatz; Polypen des Dickdarms werden daher als prämaligne Erkrankungen angesehen.

4. Wegen ihrer engen Beziehung zum Krebs sind Dickdarmpolypen von klinischer Bedeutung.

5. Dank der modernen diagnostischen Hilfsmittel werden diese Polypen heute öfter entdeckt als in der Vergangenheit.

6. Eine Arbeit von Helwig u. A. "Entzündliche fibroide Polypen des Magens" wird besprochen.

7. Es wird über einen Fall von entzündlichen fibroiden Polypen des Dickdarms berichtet. Dies ist der erste in der Literatur erscheinende Fall. Seine Bedeutung auf dem Gebiete der allgemeinen Chirurgie ist aus den oben angeführten Gründen ersichtlich.

RÉSUMÉ

Les auteurs concluent que:

1. Les polypes sont de vraies tumeurs provenant de la membrane muqueuse.

2. Les polypes du gros intestin se développent avec une fréquence accrue. Ils sont souvent multiples, peuvent être sessiles ou pédiculés et sont sujets à récidives.

3. Un carcinome se développa dans une grande proportion, c'est pourquoi les polypes du gros intestin sont considérés comme précancéreux.

4. Les polypes du gros intestin sont donc importants du point de vue clinique à cause de leur étroite relation avec les carcinomes.

5. Les facilités actuelles permettent de déceler ces polypes plus souvent qué autrefois.

6. Une publication: *Polypes fibroïdes inflammatoires de l'estomac*, par Helwig et coll. est commentée.

7. Un cas de polypes fibroïdes inflammatoires du gros intestin est signalé. C'est le premier cas mentionné dans la littérature et, pour las raisons sus-énoncées, sa signification en chirurgie générale devient évidente.

RIASSUNTO

L'autore giunge alle seguent conclusioni:

1. I polipi sono dei tumori veri e propri che prendono origine dalla mucosa.

2. I polipi del colon si riscontrano con sempre maggior frequenza. Di solito sono multipli, possono essere sessili o peduncolati e recivare.

3. Il carcinoma vi si impianta abbastanza spesso, cosicchè i polipi del colon devono essere considerati come uno stato pre-neoplastico.

4. Dal punto di vista clinico, pertanto, essi assumono valore in quanto hanno stretti rapporti con cancro.

5. Con i mezzi moderni questi polipi hanno la possibilità di essere scoperti molto più sepsso che per il passato.

6. Viene citato un articolo di Helwig sui polipi infiammatori firbosi dello stomaco.

7. Viene riferito un caso di poliposi fibrosa infiammatoria del colon per la prima volta nella Letteratura.

SUMARIO

Os autores concluem que:

1. Os polipos são tumores verdadeiros, que nascem na mucosa.

2. Os polipos do intestino grosso ocorrem com freqüência crescente. São múltiplos, podem ser sesseis e pedunculados e podem recidivar.

3. O carcinoma desenvolveu-se numa porcentagem relativamente alta; daí considerar-se os polipos do intestino grosso como pré-malignos.

4. Os polipos do intestino grosso têm significação clínica, portanto, devido à sua íntima relação com carcinomas.

5. Com as facilidades atuais, êsses polipos são diagnosticados mais freqüentemente do que no passado.

6. É feita a revisão de um trabalho de Helwig e outro, sob o título *Polipos Fibróides Inflamatórios do Estômago.*

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Dupuytren's Contracture

A Survey of Cases Five Years After Operation

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IN 1949, one of us (R.G.L.) presented a paper on the subject of Dupuytren's contracture,[1] containing observations and conclusions in some 88 cases in which operation had been performed. At that time, the preoperative, operative and postoperative phases were discussed in considerable detail, and certain definite conclusions were expressed. These, in the main, were as follows:

1. The cause of the disease was uncertain. A detailed history could not point to any one dominant predisposing factor, aside from the fact that the male is mainly affected and that the disease occurs usually in late middle life.

2. Nonoperative treatment in the form of physiotherapy, radiotherapy, hormones or vitamins did not appear to influence the disease to a demonstrable degree.

3. Successful treatment involved complete removal by excision of all of the palmar fascia. Rigid aseptic technic before, during and after the operation was necessary, as well as good hemostasis, a minimum of trauma and careful skin closure.

4. After removal of the sutures, active physiotherapy and rehabilitation were needed.

With these conditions filled, 80 per cent of the cases reported at that time came within the class of satisfactory immediate postoperative results.

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Now this series of cases is being reviewed. It was possible to communicate with the patients a second time. This was done by requesting an interview for examination. In lieu of such an examination, if the patient were unable to attend, he was asked to answer a questionnaire designed to give full information of the present condition of the hand. These patients were not, in every instance, those on whom the first report was based. They were, however, treated at about the same time, with the same personnel and the same procedure. Thus the observations should be practically the same as those made on a continuing basis.

There is now a lapse of five years since operation. It was of interest to find out how the patients had fared. We were particularly interested to know whether there had been any recurrences and, if so, how many and what caused them. We also wished to know whether adjustment had to be made in the type of work done by the patients and what those adjustments were. Next, we desired to know whether, if these patients had to have the hand treated all over again, they would choose operation; and finally, could this review point to any improvement in the selection of cases in operation, in postoperative management or in rehabilitation?

There is one factor in this series that should be mentioned. Most of the patients were returned Army veterans. Many of them were pension-minded, either hoping

to have a pension established or trying to increase the pension they already received. In this group the subjective picture was often at great variance with the objective observations. Thus the examiner has relied a great deal on what he observed and, in some cases, minimized some of the weird postoperative complaints.

There were 125 hands operated upon in this series, belonging to 828 patients. This, in itself, brings out the fact that approximately 50 per cent of the patients returned for operation on a bilateral lesion. (Operation on both hands at the same time was never done.) The following points were particularly sought as being important in judging results:

1. *Age.*—Of all the patients, 90 per cent fell between the ages of 40 and 60 years. The youngest patient was 32 years old and the oldest 73. As for good or bad results depending on age, no conclusions were possible. The older patients tended towards arthritic changes in the hand, while the young patient was more prone to sympathetic spasm and sympathetic pain.

2. *Skin Incision.*—Two types of skin incision were used. One was that shown by Dr. Sterling Bunnell[2]—along the distal palmar crease and then turning proximally upward when the ulnar side of the hand was reached. The other consisted of two separate incisions along the distal and the proximal palmar creases. The immediate postoperative result, as stated in 1949, indicated better healing from the latter approach. Now, however, there does not appear to be any significant advantage in either incision, except for personal preference. Both approaches have resulted in good, pliable, noncontracted scars, even when free skin grafting was done.

3. *Nerve Lesions.*—Complaints were made of some anesthesia in 6 hands. The main complaint, however, was paresthesia, confined mainly to the palm. Of the 6 cases of anesthesia the side of the finger was involved, and in 4 of these cases, the operative report noted damage to the branch of the median nerve, which was not repaired at the time because of inability to find the distal end of the cut nerve branch. Aside from these 6, there were 32 hands in which, the patient stated, he had some form of parasthesia, usually of the operative site, "tingling," "twinge of pain when cold," "dead feeling," "pain on light pressure" and "pain in arm and shoulder" were typical complaints. Objectively, none of these had anesthesia in the palm or fingers, even in the area of split skin grafts. There were a few, however, who had hypersensitive palms even after five years. Another observation was that they were unable to use—or at least conscious of apprehension when they used—a screwdriver or a short-handled wrench. This was because of concentration of pressure in the midpalm. Of these 32, the great majority of the parasthesis were minor and did not worry the patient unduly.

4. *Wound Healing.*—Fifty of the hands had undergone some interruption of primary healing of the wounds. Most of these showed some gaping, usually in the distal crease, after removal of the sutures or masceration at the site of one or more sutures. The immediate postoperative complication was not carried over into the five-year class, as practically all of these hands had well healed, pliable scars, without adhesion to the underlying tendons. The exceptions here are the recurrences, to be mentioned later. The occurrence of secondary wound healing, however, does prolong the recovery stage and is much the largest complicating factor in the increase of duration of postoperative morbidity. This single factor has caused us the most concern. In later cases this complication has been significantly reduced,

but by no means eliminated; it still occurs all too frequently. There are two principal causes:

a. Mild infection, residual in the thick, cornified layers of the palmar skin. This infection usually shows itself as a maceration under the lifted epidermis at the suture line about the time that the sutures are removed. It occurs oftener in those doing heavy manual work, when there is a thick callus over the attached skin of the contracted palmar fascial band. When possible, such patients are advised to take a holiday and soften the hand with lanolin before the operation.

b. Hemorrhage under the flap. This seems to occur occasionally, regardless of the hemostasis after removal of the tourniquet. Pressure dressing and/or retaining sutures through to the back of the hand do not consistently prevent the hemorrhage.

Other causes of breakdown of the suture line have been almost completely eliminated. They are:

a. Tension on skin flaps. With proper planning and evaluation of the particular hand, together with adequately planned rotation flaps and/or amputation of a deformed finger, this cause can be controlled.

b. Poor apposition of skin edges.

c. Too early removal of sutures.

These are controllable factors.

To restate the present observations, the type of approach to the hand did not affect the overall good results in this series.

5. *Power.* — Fifteen patients stated that the power of their grip was definitely weakened. This was not generally borne out by the time the examination was finished. Eight of these answered the questionnaire only, and for this reason a definite conclusion was not reached. There is no reason to think that this disability is at all serious or disabling.

6. *Recurrences.*—There was evidence of recurrences in 13 cases, an overall recurrence rate of 10.5. In a breakdown of these cases, one can see when the recurrence is due to either a poor or an incomplete operation. These are quite easily diagnosed by examining the palm. The center of the area is soft and depressed to follow the concavity of the hand. The edges of the depression stand out; they are taut and restrict the extension of the fingers involved. In fact, they remind one of a "picture frame." The recurrence is along the edges of the incompletely removed fascia, which has contracted and become adherent to the overlying skin. In this series there were 2 of the "picture frame" hands. Also, there was one recurrence following an intentional local excision (no reason noted on the operative sheet or history). Undoubtedly, recurrence in these 3 cases was definitely the fault of the surgeon and not of the operation. That brings the recurrence rate down to 8 per cent which might be termed past the control of the operation.

In a critical analysis of these 10 recurrences, 5 were isolated nodules that appeared on the lateral or the anterolateral aspect of the hand or the proximal phalanges. These did not cause contractures of the fingers but were adherent to the skin and painless. Two hands, belonging to the same patient, had numerous nodules involving almost the entire palm of both hands. Before operation this patient had had an extensive, bilateral involvement of three fingers. If there was an individual idiosyncrasy to Dupuytren's contracture this man had it, as he also had an involvement of both feet (not disabling) and Peyronie's disease as well. The remaining 3 had definite single band contractures either along the radial side of the index finger or along the ulnar side of the fifth finger.

7. *Results.*—The results have been put into four classes:

1. *Excellent:* Subjectively and objectively the hand is normal, with free, ful

extension of all fingers; with no pain or discomfort, and with no restriction of the activity of the patient because of his disease and operation. Twenty-nine hands (25 per cent) were placed in this class.

2. *Good:* These hands had some stigmats of the disease and the operation, but this was not worrisome or disabling to the patient. All patients with amputation of the finger, a skin graft or a slight loss of full extension (22.5 per cent or less) of the finger were put in this class if otherwise they were able to carry on their normal work without discomfort. Forty-seven hands (38 per cent) were placed in this category.

3. *Fair:* In this class the hand had definite restrictive features. These were mainly neurogenic, sympathetic or arthritic. Coldness of the hand, requiring a glove in cold weather; causalgia type of pain and glazing of the skin; stiffness of the fingers; arthritis of the elbow or shoulder; clubbing of finger tips; contractures of skin grafts, etc., were the most obvious features. As a result, the patient had found it necessary to restrict or change his occupation because of his hand. However, he was able to carry on satisfactorily with these restrictions and stated that, if he were asked to undergo the operation again in the light of his present disability, he would do so. Forty hands (32 per cent) were placed in this category.

4. *Poor:* These were the cases in which operation did not improve the hand. Probably, if they could have been chosen preoperatively, they should not have been done. Two of the hands were those of 1 person (mentioned under "Recurrences"). The poor results in the others were due to a combination of osteoarthritis of the fingers associated with poor circulation, swelling of the fingers, and the typical "hand-shoulder" syndrome, not controlled by stellate or brachial blocks. Nine hands fell into this classification, representing 8 per cent of the series.

To reiterate our results after complete excision of the palmar fascia for the treatment of Dupuytren's contracture, 23 per cent have an excellent result; 38 per cent a good result; 32 per cent a fair result, and 8 per cent a poor result. Thus 92 per cent of the patients benefited by the operation, and 8 per cent should not have been operated on.

We should now like to sum up our impressions of the operative removal of the palmar fascia as the treatment of Dupuytren's contracture. Dupuytren[3] himself, in 1832 advocated surgical excision. He was followed, ten years later, by Sir William Ferguson,[4] who, in his *System of Surgery,* stressed the fact that complete excision is the ideal method of complete cure. Since that time many methods of treatment have been tried and discussed. Because of their failure to give permanent and consistently good results, they have fallen into discard. Of late, with the benefit of better operating facilities, better anesthesia, and especially antibiotics, removal of the palmar fascia has come back into vogue. There are still a great many postoperative complications even in the best of circumstances, but the recurrence rate and the number of poor results have fallen appreciably. In our opinion the largest single factor in the poor results in our series was the syndrome of arthritis associated with sympathetic dystrophy. As these operations were performed five or more years ago, the patients did not have the benefit of treatment by cortisone and ACTH. Our only treatment, aside from physiotherapy, was the use of stellate and brachial blocks. In some cases, these gave almost spectacular relief after 3 to 6 injections. In others it was not helpful, although many patients were not willing to continue after one or two blockings.

As to the type of patient on whom to operate: As a rule, the manual worker did much better than the nonmanual worker. He was anxious to get back into produc-

tion and made a much greater effort to use his hand than did the business executive, the retired man or the artist. By way of interest, the medical men all seemed to do well. In our personal experience, the type of patient who gives the most trouble postoperatively is the high-pressure business man, often overweight, with a flabby palm, poor muscle tone and a tense nervous system. In such a patient sympathetic dystrophy almost invariably develops, prolonging the time needed for recovery.

Within the past year there have been several discussions by urologists of Peyronie's disease. It is pointed out that this particular syndrome may be much more common than was once thought, owing to reticence on the part of the patient. It may be that many patients with Dupuytren's contracture of the hand also have some contracture of the fibrous sheaths of the corpus cavernosus. Unfortunately, it did not occur to us to inquire specifically into this when we had the opportunity. It might be interesting to make such an inquiry.

Finally, we wish to stress the need for diligent, complete removal of the palmar fascia, with rigid asepsis and hemostasis, as a basis for good results with Dupuytren's contracture.

SUMMARY

The authors review, five years after operative treatment, a series of cases of Dupuytren's contracture, with data on ages of the patients, the types of cutaneous incisions used, nerve lesions, wound healing and its complications, restoration of power, and recurrences. A general survey of results from several aspects is included.

RÉSUMÉ

Les auteurs passent en revue, cinq ans après le traitement opératoire, une série de cas de contracture de Dupuytren, en donnant des indications sur l'âge des malades, les types d'incisions cutanées effectuées, les lésions nerveuses, la guérison de la plaie et ses complications, le retablissement de la force et les récidives. Une revue générale des résultats vus sous plusieurs aspects y est incluse.

RIASSUNTO

L'autore ha controllato una serie di casi di contrattura di Dupuytre a 5 anni di distanza dall'intervento; ne riferisce i dati relativi e precisamente l'età dei malati, il tipo di incisione cutanea usato, le lesioni nervose, la guarigione delle ferite e le relative complicazioni, il ricupero della forza, le recidive. I risultati sono stati discussi sotto vari punti di vista.

ZUSAMMENFASSUNG

Die Verfasser berichten über eine Reihe von Kranken mit Dupuytrenscher Kontraktur fünf Jahre nach chirurgischer Behandlung unter Angabe des Alters der Kranken, der Art der angewandten Hauteinschnitte, der Nervenschädigungen, Wundheilungen mit Komplikationen, Wiederherstellung der Funktion und der Rückfälle. Die Resultate werden von verschiedenen Gesichtspunkten aus erörtert.

SUMARIO

Os autores fazem a revisão, cinco anos após o tratamento operatório, de uma série de casos da contratura de Dupuytren, com dados sôbre a idade dos pacientes, tipos de incisões cutâneas usadas, lesões nervosas, cicatrização e suas complicações, recuperação de potência e recidivas. É incluida uma revisão dos resultados, sob diferentes aspectos.

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Accidental Ingestion of Dental Tool or Appliance

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FOREIGN bodies of many types have been ingested accidentally or deliberately under a variety of circumstances. The following cases are unique. In the first case ingestion resulted from the commonplace procedure of root canal therapy by a dental surgeon; in the second, from the improper routine replacement of a denture.

CASE 1.—M. F., a woman aged 25, while having some root canal work done on Sept. 7, 1954, moved suddenly, dislodged the "root canal file" from the dentist's hand and swallowed it. The root canal file as seen in the illustration (Fig. 1) had a sizable cylindric head, from which emerged a sharp-pointed hollow needle. The entire instrument was 1⅝ inches (3.1 cm.) long.

Physical examination a few hours after this mishap revealed no abnormality. A flat plate of the abdomen showed the foreign body in the stomach. In view of the potential danger of needle perforation of the gastrointestinal tract, the patient was hospitalized. After several days of observation during which time a regular house diet was allowed, daily roentgenograms revealed that the file had passed through the upper part of the gastrointestinal tract and had descended to the ileocecal area. Daily physical examinations of the abdomen showed no abnormalities throughout this time. The patient refused further hospitalization. At home she was observed by her family physician, and roentgenograms were taken on alternate days. On September 25, she had some pain in the right lower quadrant of the abdomen and passed a stool containing a moderate amount of bright red blood. The roentgenogram (Fig. 1) showed the foreign body to be in an unchanged position in the right lower quadrant of the abdomen, where it had been for about a week. Physical examination still revealed no abnormalities.

In view of the fixation of the file in the same position all this time, and of the melena, operation was performed on September 27. The dental broach had entered the appendix (Fig. 2) head first. The head was lodged near the tip end of the appendix. The needle end had perforated the proximal part of the appendix, and the portion outside had the omentum wrapped around it. The appendix and adjacent omentum were subacutely inflamed, thickened and reddened. There was no peritonitis. Appendectomy was performed. Postoperative convalescence was prompt.

CASE 2.—In the case of A.C., age 55, a movable denture had been removed for cleaning and replaced in its position in the mouth. It became loose and was inadvertently swallowed during sleep. This appliance was about 1½ inches ((3.7 cm.) long, and each end consisted of a pair of curved prongs with sharp points (Fig. 3). The patient was observed for about a month, during which time the denture had passed through the intestinal tract to the sigmoid, where it became lodged in a constant position. It could not be visualized sigmoidoscopically, and its position was not affected by enemas or diet. Repeated physical examinations of the abdomen during this time revealed no abnormalities, and the patient was without symptoms, but because of the fixation of the foreign body operation was advised.

On April 5, 1954, operation was performed. The denture had become lodged in the sigmoid in a transverse position. The wall of the bowel was thickened and subacutely inflamed about the denture. There were multiple diverticula in the sigmoid, and the prongs had apparently become stuck in one of them. Before the colon was opened it was not possible to dislodge the foreign body manually without tearing the bowel. A small longitudinal incision was made in the bowel over one end of the denture, which was freed and removed. The opening was closed transversely. Convalescence was uneventful.

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Fig. 1.—Dental instrument in appendix of patient M. F., consisting of cylindric head and sharp-pointed hollow needle (see text).

SUMMARY

Most ingested foreign bodies, whether sharp or blunt, will pass through the gastrointestinal tract. However, the patients who have ingested them must be observed, and frequent roentgenograms are needed. Prolonged retention of the foreign body in any area of the tract is an absolute indication for surgical removal even if there are no clinical symptoms.

If the body is radiopaque the problem is relatively simple. Nonopaque bodies that are swallowed, however, should not be viewed complacently. Careful search must be made of each stool passed until it is determined that the foreign body has been eliminated. Exploratory laporatomy must be considered if the foreign body is not passed. This may seem difficult, but is far better than the complications of toothpick or fishbone perforation of the cecum, sigmoid or small bowel at some remote date.

With regard to dental tools or appliances, there have been increasing technical advances in dentistry in the past decade. Since the 2 cases here presented signify a definite dental hazard, increasing care must be expended in reducing the possibility of such accidents. Tools should be made that cannot be swallowed readily; bridges and other appliances must be so made that they will not become dislodged.

RIASSUNTO

Molti dei corpi estranei che vengono ingeriti, siano aguzzi o smussi, possono passare attreaverso il tubo digerente. Tuttavia i pazienti che ne inghiottono devono essere sottoposti a ripetuti esami radiologici. Quando il corpo estraneo si ferma troppo a lungo in un punto qualunque del tubo digerente si deve assolutamente togliere chirurgicamente anche se non produce alcun disturbo. Se il corpo è radiopaco, il problema è relativamente semplice. Se non lo è, bisogna ricercare accuratamente nelle feci fino a che non sia stato eliminato, e sottoporre il paziente a laparatomia esplorativa se questo non avviene. Ciò può sembrare difficile, ma è sempre meglio di una perforazione tardiva del ceco, del sigma o del tenue. Per quqanto si riferisce alle protesi dentarie o a loro parti, si deve dire che vi sono stati grandi progressi nella tecnica in questi ultimi 10 anni. I 2 casi presentati dimostrano che bisogna diminuire i rischi di questo genere con la massima cura: si devono costruire protesi non facili ad essere deglutite e ponti fatti in modo che non possano muoversi.

RÉSUMÉ

La plupart des corps étrangers ingérés, soit aigus, soit mousses, passeront à

travers le tractus gastrointestinal. Cependant, les patients qui en ont ingéré doivent être nusen observation et radiographiés fréquemment. La rétention prolongée du corps étranger dans quelque coin du tractus digestif est une indication absolue de l'enlèvement par voie chirurgicale, même s'il n'y a pas de symptômes cliniques.

Si le corps est opaque aux rayons X, le problème est relativement simple. Par contre, les corps non opaques avalés ne seraient los bein vus. On doit faire des recherches soigneuses pour chaque selle émise jusqu'à ce qu'il soit établi que le corps étranger a été éliminé. La laparotomie exploratrice doit être envisagée si le corps étranger n'est pas passé. Ceci peut paraître difficile, mais est préférable aux complications telles que perforation tardive, par un cure-dent ou une arête de poisson, du caecum du sigmoïde ou de l'intestin grêle.

Quant aux instruments dentaires ou accessoires, il y a eu, cette dernière décade, des progrès techniques accrus en art dentaire. Puisque les deux cas présentés ici constituent un hasard dentaire précis, on doit accroître les précautions pour cette dernière décade, des progrès techniques accrus en art dentaire. Puisque les deux cas présentés ici représentent un hasard dentaire précis, on doit accroître les précautions pour réduire la possibilité de tels accidents. Les instruments devront être faits de manière à ne pas pouvoir être avalés brusquement, les bridges et autres accessoires seront fixés solidement.

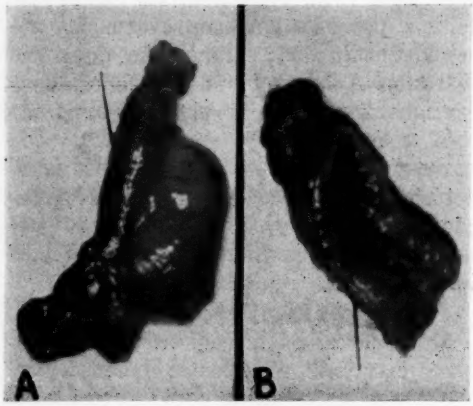

Fig. 2.—Dental instrument in removed appendix (see text).

Fig. 3.—Roentgenogram showing movable denture swallowed by patient A. C.

ZUSAMMENFASSUNG

Verschluckte Fremdkörper, scharfe sowohl wie stumpfe, passieren meistens den Magendarmkanal ohne weiteres. Die Kranken müssen jedoch beobachtet werden, und Röntgenaufnahmen werden häufig benötigt. Das langdauernde Verbleiben des Fremkörpers in irgendeinem Abschnitt des Verdauungskanals stellt eine absolute Indikation zu seiner chirurgischen Entfernung dar, auch wenn keine klinischen Symptome bestehen.

Wenn es sich um einen strahlenundurchlässigen Fremdkörper handelt, ist das

Problem verhältnismässig einfach. Strahlendurchlässige verschluckte Fremdkörper sollten jedoch nicht vernachlässigt werden. Jede Stuhlentleerung muss sorgfältig untersucht werden, bis das Ausscheiden des Fremdkörpers festgestellet ist. Passiert er nicht, muss eine explorative Bauchoperation in Erwägung gezogen werden. Das mag zwar schwierig erscheinen, ist aber weit besser als die Komplikationen einer Perforation des Zökums, des Sigmoideums oder des Dünndarms, die ein Zahnstocher oder eine Fischgräte irgendwann später hervorrufen kann.

Was die zahnärztlichen Instrumente und Apparate betrifft, so sind im letzten Jahrzehnt zunehmende technische Fortschritte in der Zahnheilkunde zu verzeichnen. Die beiden hier vorgestellten Fälle sind deutliche Beispiele des mit der Zahnbehandlung verknüpften Risikos. Es ist mit wachsender Sorgfalt darauf zu achten, dass die Möglichkeit derartiger Unfälle herabgesetzt wird. Zahnärztliche Instrumente sollten so konstruiert sein, dass sie sich nicht leicht verschlucken lassen. Brücken und andere zahnärztliche Apparaturen müssen so angelegt werden, dass sie sich nicht entankern können.

SUMARIO

A maioria dos corpos extranhos ingeridos, quer agudos ou obtusos, passam através do tracto gastrointestinal. Contudo, os pacientes que os ingeriram devem ser observados, sendo necessárias chapas radiográficas freqüentes. A retenção prolongada do corpo extranho em qualquer área do tracto constitui indicação absoluta para sua retirada cirúrgica, mesmo que não haja sintomas clínicos.

Caso o corpo seja rádio-opaco, o problema é relativamente simples. Contudo, os corpos não rádio-opacos não devem ser encarados com complacência. Deve ser feita a pesquiza em cada evacuação, até ser determinada a eliminação do corpo extranho. A laparotomia exploradora deve ser considerada caso o corpo extranho não seja eliminado. Tal providência pode parecer difícil, mas é bem mais satisfatória do que as complicações de perfuração do ceco, sigmóide ou delgado por palito e espinha de peixe em data posterior.

Com relação aos instrumentos dentários, a última década tem registrado uma melhora crescente na técnica odontológica. Visto que os 2 casos aqui apresentados significam um risco definido, deve-se tomar cuidados crescentes no sentido da redução da possibilidade de tais acidentes. Devem ser feitos instrumentos que não possam ser deglutidos prontamente; pontes e outros aparêlhos devem ser feitos de maneira tal a não serem deslocados.

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An Aid in the Avoidance of Fetal Loss and in the Prevention of Maternal Complications

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FETAL loss and maternal complications of pregnancy can be greatly reduced. We do not accept the defeatist attitude that threatened abortion, which of all complications is responsible for the highest fetal loss, means a blighted ovum and that therapy is of no value. Any patient who presents any of the signs and symptoms of threatened spontaneous abortion is a deserving candidate for therapy that may aid in the prolongation of gestation. In our opinion prophylactic therapy is superior to active therapy. The results obtained by the therapeutic administration of an especially prepared form of wheat germ oil concentrate indicate that there may be present in this substance a factor or factors necessary for proper nidation of the fertilized ovum and continuation of the pregnancy to the period of viability or to term.[1]

Completely controlled experiments involving human reproduction are not possible. One investigator may use alternate patients, giving one a placebo and the next definitive medication. Another may use a large group of consecutive patients, thus establishing an expected incidence of all the complications of pregnancy and the prenatal period. We chose the latter investigative method. In order to arrive at the expected incidence of these complications, a careful study was made of 1,973 consecutive patients from our private practice who were given prenatal medication other than wheat germ oil concentrate. In addition, we analyzed the records of 32,689 patients delivered in Franklin County, Ohio, who had not received this medication.

This report contains the results of our observation of 1,000 consecutive private patients who were given wheat germ oil concentrate as a prophylactic agent.* For the majority of patients the regime of medication was started at the first prenatal visit. In over 90 per cent this meant the beginning of medication between the third and sixteenth weeks of gestation. A small group of patients presenting problems of infertility was given the medication as a preconceptional aid. No patient was excluded from this study because of preexisting diabetes, nephritic toxemia, heart disease, tuberculosis or a history of habitual abortion.

The Clinical Experiment.—From the first visit until delivery, each patient was given daily three 3-minim capsules of wheat germ oil concentrate.** These capsules were taken with the stomach empty, so that the concentrate would not be affected by any recently ingested iron preparation or rancid fats. In this series the patients were divided equally between pri-

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*A 10:1 concentrate of wheat germ oil (Denamone), made by removing the glycerides and retaining the unsaponifiable fraction. It is extracted from fresh wheat germ with ethylene dichloride by the VioBin Corporation, Monticello, Illinois.

**The therapeutic significance of vitamin E in the daily dose (9 mg.) may be disregarded, in view of its small percentage of the normal daily intake of tocopherol.

migravidae and multigravidae. The age range was between 15 and 46 years.

In uncomplicated pregnancies the dosage of the concentrate remained unchanged until delivery. At the first sign of threatened abortion, premature labor or toxemia it was increased immediately to twenty capsules daily, the patient remaining ambulatory. This dosage was maintained until the complication was controlled or the pregnancy had terminated. When the complication was controlled the dosage was decreased by one capsule daily until the patient again was taking three capsules daily. This type of management is inexpensive, does not require the physician to make frequent visits for parenteral therapy and permits the mother to care for other children and engage in light housework.

In the presence of threatened abortion, if cramps and mild bleeding persisted for more than forty-eight hours, a catheterized urine specimen was obtained for a male frog pregnancy test. If the test gave a negative result and the bleeding was not excessive, the administration of wheat germ oil concentrate was continued and the pregnancy test repeated in twelve to twenty-four hours. Occasionally the first urine specimen obtained after the onset of bleeding did not cause a positive reaction in the male frog, but the second specimen would give a positive reaction indicative of functioning placental tissue. If two negative results were obtained with urine specimens taken twenty-four hours apart, a diagnosis of inevitable, incomplete or missed abortion was made, and the contents of the uterus could be evacuated with the knowledge that a living pregnancy would not be terminated.

The previous obstetric histories of all these patients were ignored. Each patient was treated as a primigravida unless she had had a previous abdominal delivery. These patients were delivered by elective laparotrachelotomy approximately two weeks before the expected date of confinement.

Evaluation of Therapy.—Threatened Abortion: In this series of 1,000 patients, 95, or 9.5 per cent, were threatened with abortion. Sixty-one, or 64.2 per cent of the series who were so threatened were controlled, delivering viable babies at or near term. Thirty-four, or 35.7 per cent, of those who were threatened with abortion did abort.

Seven of these abortuses showed developmental deficiencies, giving a corrected abortion rate of 2.7 per cent for the series. In this series there was one hydatidiform mole.

Of the conceptuses we were able to examine, there were 42 in the comparison series and 7 in the Denamone series showing developmental deficiencies.

TABLE 1.—*Threatened Abortion*

	No Treatment 1,973 Patients	*Denamone 1,000 Patients*
Threatened abortion	16.6%	9.5%
Abortion	15.0%	3.4%
Abortion (corrected)	15.0%	2.7%
Deficiencies of fetal development	2.1%	0.7%

Rh Factor: One hundred and twenty of these patients were Rh negative. Ten husbands were Rh negative. Seventy-seven of these patients were multigravidae. Five of these were sensitized to the Rh factor. Erythroblastosis appeared in some form in 4 of the babies, with 3 survivors. Five multigravidae were threatened with abortion. None aborted. Three primigravidae were threatened with abortion and 2 of them did abort.

Wheat germ oil concentrate may be a factor in the prevention of erythroblastosis fetalis by lowering the incidence of threatened abortion and thereby preserving the integrity of the syncytial barrier.

Prematurity: There were 31 premature infants, including 2 sets of twins. Twenty-one of these babies survived. Of the 10

TABLE 2.—*Rh Factor*

		Analysis of 1000 Consecutive Private Obstetric Patients
Rh negative patients		120
Rh negative husbands		12
Multigravidae		77
Sensitized		5
Erythroblastosis		4
Babies surviving		3
Threatened abortion		7
Multigravidae	4	
Primigravidae	3	
Abortion		2
Multigravidae	0	
Primigravidae	2	
Malformation or deficiencies		0

TABLE 3.—*Prematurity*

Class 1—1,000 Gm. or less	2
Class 2—1001-1500 Gm.	5
Class 3—1501-2000 Gm.	16
Class 4—2001-2500 Gm.	8
Total	31

	Survivals	*Neonatal Deaths*
Class 1	2	0
Class 2	1	4
Class 3	10	6
Class 4	8	0
Total	21	10

who succumbed, no cause but immaturity could be found in 6. Four babies in this group had abnormalities which alone might not have caused death. When these conditions were added to the hazard of prematurity, death resulted. One baby had a bronchopleural fistula, 1 had exstrophy of the bladder and 2 succumbed of congenital cardiac lesions.

The corrected premature survival rate is 80.6 per cent, and the incidence of prematurity in this series is 3.1 per cent. This incidence of prematurity is lower and the survival rate higher than those usually reported.

Bleeding in pregnancy doubles the incidence of prematurity.[2] Prematurity is the largest single cause of death in the first year of life. Therefore, the use of any substance that will aid in the prevention of uterine bleeding is an important factor in fetal salvage.

Toxemias of Pregnancy: The expected incidence of this complication is 10 per cent. In this series 18 patients, or 1.8 per cent had or acquired some form of toxemia of pregnancy.

Not only was the incidence of toxemia lowered, but the severe types occurred less frequently than was expected. All the mothers survived. One baby was lost, a premature stillborn child of a noncooperative diabetic mother.

Stillbirths: There were 5 stillbirths. The stillbirth of the child of the diabetic mother was the only avoidable stillbirth of the series. Of the unavoidable deaths, 3 were due to cord accidents and one to complete nontoxemic abruptio placenta.

COMMENT

Some of the products of conception were either lost or destroyed before they could be examined. Of those examined, 7 showed gross evidence of malformation of development. We were not convinced that the incidence of "blighted ovum" was high. Of the patients who were threatened with abortion and who were receiving wheat germ oil concentrate, none was delivered, from the period of viability to term, of a surviving baby with any demonstrable anomaly.

Hughes reported in 1945 that abnormalities in glycogen metabolism in the endometrium and myometrium had a definite relation to sterility and spontaneous abortion.[3] All parts of the female reproductive tract contain glycogen in varying amounts and under hormonal control. When pregnancy occurs and progresses normally the placenta grows rapidly. During this early part of pregnancy glycogen is laid down in growing tissue to serve as food supply.[4] The epithelial glands of the

TABLE 4.—*Toxemias of Pregnancy*

	Group	*No. of Patients*	*Per Cent*
Nephritic toxemia	A.1 (a)	1	0.1
Mild preeclampsia	B.1 (a)	14	1.4
Severe eclampsia	B.1 (b)	2	0.2
Eclampsia	B.2 (a)	1	0.1

body of the uterus are the richest in glycogen. This is probably one of the reasons that the nidation site of the majority of pregnancies is in the upper portion of the uterus, where the nutritional elements necessary for implantation, growth and development are most abundant[4]. The glycogen content of the pregnant uterus increases from 1 Gm. to 2 Gm. per hundred cubic centimeters during the course of pregnancy.[4] This is necessary to provide nourishment for the fetus and a source of energy for the work of the myometrium during labor.

Work now in progress indicates that there is a substance or substances in Denamone (wheat germ oil concentrate) that increases the glycogen storage in the uteri of intact rats, and also in the seminal vesicles of intact rats.[5] Other studies report factors in wheat germ oil, other than vitamin E,[6] that have a beneficial effect upon the human reproductive system.

This study indicates that sterility and fetal loss from spontaneous abortion and previable premature birth may be nutritional in origin. Since the modern diet is lacking in natural oils derived from grain, it may be deficient in substances necessary to protect the mother and fetus. The oral administration of wheat germ oil concentrate (Denamone), which is a natural and stable product and which aids women with problems of infertility, abortion and habitual premature labor, to lead normal reproductive lives, is recommended.

SUMMARY

A summary analysis of the results of prophylactic therapy in 1,000 consecutive private patients is presented, with the following results:

	No Treatment 1,973 Patients	*Denamone 1,000 Patients*
Threatened abortion	16.6%	9.5%
Abortion	15.0%	3.4%
Abortion (corrected)	15.0%	2.7%
Prematurity	7.1%	3.1%
Toxemia	10.0%	1.8%
Stillbirths	2.3%	0.5%

From the results obtained, the authors consider prophylactic therapy superior to active therapy in the reduction of all the complications of therapy. The correction of faulty glycogen metabolism and storage by the use of wheat germ oil concentrate is suggested.

RÉSUMÉ

Une analyse sommaire des résultats de la thérapeutique prophylactique chez 1000 malades privés consécutifs est présentée. Les résultats sont les suivants:

	Traitement 1973 Malades	*Denamone 1000 Malades*
Thraceedeavortement	16,6%	9,5%
Avortement	15,0%	3,4%
Avortement (corrigé)	15,0%	2,7%
Prématurité	7,1%	3,1%
Toxémie	10,0%	1,8%
Mort-nés	2,3%	0,5%

En présence des résultats obtenus, les auteurs considèrent que le traitement prophylactique est supérieur à la thérapeutique active en réduisant toutes les complications de la thérapie. La correction du métabolisme défectueux du glycogène et la constitution de réserves par l'emploi d'huile d germes de blé concentrée sont proposées.

ZUSAMMENFASSUNG

Ene zusammenfassende Analyse der Ergebnisse prophylaktischer Behandlung bei einer ununterbrochenen Serie von 1000 Privatpatientinnen führt zu folgenden Resultaten:

	Unbehandelt 1973 Patientinnen	*Denamone 1000 Patientinnen*
Drohender Abort	16,6%	9,5%
Abort	15,0%	3,4%
Abort (korrigiert)	15,0%	2,7%
Frühgeburt	7,1%	3,1%
Schwangerschaftstoxikose	10,0%	1,8%
Totgeburt	2,3%	0,5%

Auf Grund der erzielten Resultate halten die Verfasser zur Herabsetzung aller Behandlungskomplikationen die prophylaktische Therapie für wirksamer als aktive Therapie. Es wird vorgeschlagen,

Störungen des Zuckerstoffwechsels und der Zuckerspeichrung durch Anwendung konzentrierten Weizenöls auszugleichen.

RIASSUNTO

Viene presentato il risultato di una terapia profilattica eseguita su 1,000 pazienti:

	Nessuna Cura 1973 Casi	*Denamone 1000 Casi*
Minaccia di aborto	16,6%	9,5%
Aborto	15,0%	3,4%
Aborto (corretto)	15,0%	2,7%
Prematurità	7,1%	3,1%
Tossiemia	10,0%	1,8%

In base a questi risultati l'autore conclude che la terapia profilattica è superiore ad ogni terapia attiva nel ridurre le complicazioni e consiglia l'impiego di olio concentrato di germi di grano per curare le insufficienze nel metabolismo del glicogeno.

SUMARIO

É apresentada uma análise sumária dos resultados do tratamento profilático em 1.000 pacientes particulares consecutivos, com os seguintes resultados:

	Sem Tratamento 1973 Pacientes	*Denamone 1000 Pacientes*
Aborto iminente	16,6%	9,5%
Aborto	15,0%	3,4%
Aborto (corrigido)	15,0%	2,7%
Prematuridade	7,1%	3,1%
Toxemia	10,0%	1,8%
Nasci-mortos	2,3%	0,5%

Pelos resultados obtidos os autores consideram o tratamento profilático superior ao tratamento ativo na redução das complicações. Sugerem a correção das falhas do metabolismo do glicogênio e seu armazenamento.

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It would seem that men do not find enough defects in themselves; they augment the number by certain singular qualities which they affect to put on, and these they cultivate with so much assiduity, that they become at length natural defects which are no longer capable of correction.

—*La Rochefoucauld*

Ascaris Lumbricoides and Obstructive Jaundice

Report of a Case

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ASCARIS lumbricoides is a Nemathelminth distributed widely over the world, but is prevalent and extremely common in warm climates.

Persons of any race, class, age and sex may be infected, although children and persons living under doubtful hygienic conditions are most susceptible to attack. Ascaris lumbricoides is often associated with other worms, such as Oxyuris, trichinuris trichinura, ancylostoma duodenale and strongyloides stercoralis. It is less frequently associated with Giardia lamblia and Trichomonas hominis. Statistics at the Tela Hospital, Tela Railroad Company, showed that of 8,309 patients admitted in 1950, 7,005 had stool examinations and that 1,576 patients, or 22.5 per cent, had ova of ascaris in the stools; 3,868 patients, or 55.2 per cent had other parasites, making a total of 5,444 infestations, or 77.7 per cent.

The infestation occurs in man after ingestion of ova without an intermediate host. From the shields of the ova in the duodenum emerges the rhabditiform larvae, which, after traversing the intestinal wall, invade the lymphatic and venous systems to reach the pulmonary alveoli by the way of the thoracic duct or portal system and vena cava. Two moults occur in the alveoli within approximately ten days. Subsequently the larvae migrate toward the bronchi and trachea and descend to the esophagus to reach the intestine. Approximately ten weeks after infection the fourth moult is developed in the small intestine. The adult female ascaris measures as much as 40 cm. in length and 0.3 cm. in diameter. The male is shorter, measuring from 15 cm. to 25 cm.

Pathologic Lesions.—The adult worms frequently live in the upper part of the small intestine.[1] As a rule the number present is small, but in heavy infestations, many hundreds may be present, rolled in clumps, and may cause acute mechanical intestinal obstruction, which may be demonstrated in the roentgenogram as filling defects. The worms may migrate up or down the gastrointestinal tract and be passed *per anum*, or, more frequently, vomited. They may cause suffocation by wandering into the glottis, causing sudden death in infants and children.

After penetration by the larvae into the intestinal mucosa, hemorrhages and abscess formation may occur in any organ. Confluent bronchopneumonia or pneumonia often kill children as the larvae penetrate the alveoli. The larvae may enter the pancreatic and main bile ducts and grow to maturity in the pancreas and liver. Since their growth is gradual, there are dilatation of the bile ducts, atrophy of the epithelium and often hemorrhages of the wall, giving rise to obstructive jaundice.[2]

The adult worms may obstruct the lumen of the appendix, causing appendicitis. In some instances they perforate intestinal ulcers (typhoid fever), causing peri-

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tonitis or fistulas. They may invade the nose, middle ear, pleural cavity, vagina, bladder or ureter. Surgeons in the tropics are sometimes confronted by a serious problem after performing surgical operations on the gastrointestinal tract, such as perforation of sutures used for gastrointestinal anastomosis caused by the migration of ascaris lumbricoides.*

Watery extract of A. lumbricoides contains a primary albumose named Ascarose by Sang (1938). This is present in different tissues of both male and female worms and is capable of inhibiting the action of pepsin and trypsin. In heavily infested mammals its inhibitory action may cause nutritional disorders due to inability to digest the protein constituents of their diet.[3]

The digestion of protein by ascaris lumbricoides has been studied by two Americans, Geimar and McKee. For further information I refer the reader to their excellent paper.[4]

There is danger, during treatment, that the sudden death of a great many adult worms may result in intestinal obstruction and that constitutional symptoms may occur, owing to the liberation of toxins from the dead worms. In order to avoid these serious complications, physicians must rid patients of these parasites. Routine vermicide should be used for children. Certain obscure gastrointestinal symptoms in adults will resist every sort of treatment until a vermifuge is administered. A routine stool examination must be done on every patient: and even if ova are not found, the drug must be administered without hesitation. At the Tela Hospital a mixture of Chenopodium and castor oil is routinely used and given to the patient on empty stomach in 2 doses every three hours. Two drops of oil of chenopodium is prescribed for every dose in children from 1 to 2 years of age; 3 to 5 for children aged 3 to 5 years; 6 to 8 for children aged 6 to 10 years, and 8 to 15 for adults. The dose is reduced for weak persons and pregnant women.[5]

*In October 1952 a female patient underwent a cholecystectomy and exploration of the common duct for lithiasis at the Tela Railroad Co. Hospital in Tela. A T tube was inserted in the common duct for drainage. Next day the flow of bile stopped. A long round worm (ascaris) was removed without any difficulty from the lumen of the T tube, after which the drainage of bile was plentiful. In another case, after cholecystectomy and choledocostomy had been performed, an ascaris lumbricoides made its way through the operative incision on the second postoperative day. Both patients recovered nicely.

REPORT OF A CASE

A 30-year-old white housewife entered the Tela Hospital for the first time on June 20, 1950, complaining of a sharp, frequent pain in the right upper quadrant of the abdomen, of one year's duration. The pain appeared after eating, lasted two to three hours and radiating to the right shoulder. It was associated with nausea and a little vomiting but was unrelated to the ingestion of any particular food. Mild chills, followed by slight fever, occurred every afternoon. There was no diarrhea. The patient noticed a yellow discoloration of the conjunctivae fifteen days prior to her admission to the hospital.

The family history was noncontributory. The patient had had malaria on several occasions and had been treated by local physicians with antimalarial drugs. The last attack had occurred about three years earlier.

Physical examination revealed the patient to be pale and chronically ill. The temperature was 99 F., the pulse rate 102 per minute, the respiratory rate 24 per minute and the blood pressure in millimeters of mercury 118 systolic and 79 diastolic in both arms. The lungs were clear to percussion. A persistent sibilant rale was present in the base of the left lung. The heart was normal. The edge of the liver was palpable 5 cm. below the right costal margin. The spleen was palpable 4 cm. below the costal margin.

The specific gravity of the urine was 1020. An acid reaction and traces of albumin were noted. The hemoglobin level was 10.5 Gm. per hundred cubic centimeters, with an erythrocyte count of 3,500,000. The leukocyte count was 5,400 per cubic millimeters of blood, with a differential count of 82 per cent polymorphonuclears, 4 per cent eosinophils, 10 per cent lymphocytes and 4 per cent mononuclear cells.

On June 21 the temperature rose to 102 F.,

with no increase of the pulse rate. Chemical examination of the blood revealed the following data: icterus index, 80; bilirubin 1 minute, 7 mg. per hundred cubic centimeters; thirty minutes, 11.1 mg. per hundred cubic centimeters.

The prothrombin time was twelve minutes; nitrogen, eleven and one-half minutes, and thymol turbidity, seven minutes. The value for alkaline phosphatase was 15.7 B.U. A C.C. flocculation test gave positive results. The patient's blood was of Type O, with a negative RH factor. The stools contained ova of uncinaria, ascaris and trichuris.

The increased alkaline phosphatase level and the relatively low thymol turbidity suggested obstructive jaundice caused by a common duct stone, a carcinoma of the head of the pancreas or some other condition.

On June 23, 1950, with high spinal anesthesia, a laparotomy was carried out. The abdomen was entered through a high right rectus incision. The gallbladder was identified only after prolonged search, as it was covered with dense adhesions from surrounding structures. It was the size of a cherry, ½ by ½ inch, and contained no stones. The cystic duct was filiform and obliterated. The common duct was dilated up to ½ inch (0.6 cm.) in diameter, and no stones were encountered on palpation. The duct was then opened and explored. To our great surprise a round worm 6 inches (15 cm.) long, white, live, was readily identified within the lumen of the common duct and removed easily with a Kelly forceps (see operative sketch). No other worms, stones or strictures were observed. A T tube was inserted into the common duct for drainage, and the wound was closed in layers.

The postoperative course was uneventful. Early ambulation (first postoperative day) was achieved. The temperature was down to 98.6 F. on the fourth day. The T tube was draining very well. The sutures were removed on the tenth day and a vermifuge was administered to the patient on the twelfth day.

A cholangiogram taken on the twenty-eighth postoperative day showed no obstruction, and the T tube was removed on the same day. The icterus index was still elevated to 25 units on July 19. The patient was discharged home on the thirtieth postoperative day, in excellent condition.

The final diagnosis was hypoplasia of the gallbladder, chronic cholecystitis, atrophy of the cystic duct, ascaridiasis of the common duct and obstructive jaundice.

White roundworm 6 inches (15 cm.) long, still alive when extracted. It was readily identified within the lumen of the common duct and was easily removed with a Kelly forceps.

The patient was followed up during the three years after discharge. At the latest interview she was free of symptoms and enjoying good health.

SUMMARY

Ascaridiasis of the common duct causing obstructive jaundice, a comparatively rare condition, is discussed as to pathogenesis, diagnosis, prevention and treatment.

One case is reported in detail. Treatment, i.e., surgical intervention, should not be delayed. Good results require early diagnosis and prompt treatment. Postponement of operation is to be condemned, because liver damage and associated cholangitis can occur sooner or later.

Preventive treatment is also very important. In order to avoid serious complications, physicians must rid patients of all these parasites.

ZUSAMMENFASSUNG

Die Pathogenese, Diagnostik, Prophylaxe und Therapie der Spulwurmkrankheit des Choledochus mit einhergehender Obstruktionsgelbsucht, einer verhältnismässig seltenen Erkrankung, werden erörtert.

Es liegt die genaue Beschreibung eines Falles vor. Die Behandlung, d. h. der chirurgische Eingriff, sollte nicht verzögert werden. Voraussetzung für gute Erfolge sind eine frühe Diagnose und sofortige Behandlung. Ein Aufschub der Operation ist wegen der Leberschädigung und der damit verbundenen Cholangitis, die früher oder später entstehen können, zu verdammen.

Vorbeugende Behandlung ist ebenfalls von grosser Bedeutung. Es ist die Aufgabe des Arztes, seine Patienten von all diesen Parasiten zu befreien, um schwere Komplikationen zu verhüten.

RIASSUNTO

Viene tratteggiata la patogenesi, la diagnosi, la profilassi e la cura dell'ittero meccanico da ascaridi nel coledoco, con presentazione di un'osservazione personale.

L'intervento chirurgico non deve essere procrastinato; il successo di esso è legato ad una diagnosi precoce. Ogni ritardo all'intervento conduce a lesioni epatiche e, presto o tardi, alla colangite.

E' anche molto importante il trattamento preventivo; per evitare complicanze è necessario liberare completamente il paziente da ogni parassita.

RÉSUMÉ

L'ascaridiose du cholédoque, produisant un ictère par obstruction, est relativement rare. Sont discutés: la pathogénie, le diagnostic, la prophylaxie et le traitement de cette affection.

Un cas est expliqué en détail. Le traitement, c'est-à-dire l'intervention chirurgicale, ne doit pas être différé. De bons résultats exigent un diagnostic précoce et un rapide traitement. On doit condamner l'ajournement de l'opération car l'alteration du foie et la cholangite associée peuvent survenir tôt ou tard.

Le traitement préventif est aussi très important. En vue d'éviter de serieuses complications, les médecins devront débarrasser les malades de tous ces parasites.

RESUMEN

Se discute la patogenia, diagnóstico, prevensión y tratamiento de la ascaridiasis del colédoco produciendo icteria obstructiva, padecimiento comparativamente raro.

Se comunica un caso detalladamente. El tratamiento quirúrgico no debe retardarse.

Los buenos resultados requieren el diagnóstico precoz y el tratamiento temprano. Debe de condenarse el retardo de la operación a causa de la lesión hepática y la colangitis asociada que puede ocurrir tarde o temprano.

El tratamiento preventivo es también importante. Para evitar complicaciones deben de librarse a los pacientes de todos estos parásitos.

SUMARIO

A ascaridiase do colédoco, provoando ictericia obstrutiva, uma afecção comparativamente rara, é discutida no que diz respeito à patogênese, diagnóstico, profilaxia e tratamento.

É apresentado um caso detalhadamente. O tratamento, isto é a intervenção cirúrgica não deve ser atrazada. Bons resultados exigem diagnóstico precoce e tratamento adequado. O adiamento da operação deve ser condenado, pois danos hepáticos

e colangite associada podem ocorrer mais cêdo ou mais tarde.

O tratamento preventivo também é muito importante. Para evitar complicações graves, os médicos devem libertar seus pacientes de todos êsses parasitas.

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The uses to which men have put their increased control over natural forces are curious. In the nineteenth century they devoted themselves chiefly to increasing the numbers of *homo sapiens*, particularly of the white variety. In the twentieth century they have, so far, pursued the exactly opposite aim. Owing to the increased productivity of labor, it has become possible to devote a larger percentage of the population to war. If atomic energy were to make production easier, the only effect, as things are, would be to make wars worse, since fewer people would be needed for producing necessaries. Unless we can cope with the problem of abolishing war, there is no reason whatever to rejoice in labor-saving technique, but quite the reverse. On the other hand, if the danger of war were removed, scientific technique could at last be used to promote human happiness. There is no longer any technical reason for the persistence of poverty . . . If war no longer occupied men's thoughts and energies, we could, within a generation, put an end to all serious poverty throughout the world.

—*Russell*

Omentoplasty and Capsulectomy in the Treatment of Echinococcus Cysts of the Liver

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THE geographic distribution of echinococcus disease covers a considerable area of the world. The predominantly infested areas include South America, Australia, Russia, Iceland, North Africa and Italy. The problem of proper treatment, therefore, is highly important. In Greece the disease is not infrequent.

The purpose of this paper, therefore, is to review the methods of treatment of echinococcus cysts of the liver and to present the authors' experience in 10 cases treated by omentoplasty and capsulectomy.

So far the attempts at medical treatment of echinococcus disease have failed. Generally, the treatment of this parasitic infestation is exclusively surgical. This applies also to echinococcus cysts of the liver. The preoperative care and preparation of the patient, however, is of the utmost importance in cases of hepatic echinococcosis.

The echinococcus cyst is not a neutral body but a toxic parasite. We cite the report of Lebon and Eisenbeth[1] in the International Congress for Echinococcus Disease (Algeria, 1951). These authors observed lesions in histologic sections of the liver at variable distances from the parasitic cysts. The liver showed "evidence of hepatitis" and "areas of sclerosis."

The picture is noticeably similar to that of hepatic cirrhosis. Therefore, the preoperative preparation (proper diet, administration of vitamins, etc.) is necessary.

At present the methods of surgical treatment of echinococcus cysts of the liver are as follows:

1. Marsupialization.
2. Capsulorraphy.
3. Omentoplasty.
4. Capsulectomy.
5. Partial hepatectomy.
6. Lobectomy.

A. *Approach.*—The choice of incision depends on the location of the cysts. Many surgeons prefer the upper median incision because this approach offers the best possibility for careful examination of the whole gland and detection of the presence of more than one cyst (Vergoz[2]).

2. *Capsulorraphy:* This procedure consists of removal of the mother cyst, followed by complete closure of the fibrous pericystic capsule. For added safety, the parietal peritoneum of the anterior abdominal wall may be sutured about the periphery of the fibrous capsule (capsulopexy [Quenu[3]]). In this way the pocket is isolated from the peritoneal cavity, and it is also possible, if necessary, to approach it directly and drain it again.

A variant of this method is "capitonage" (collapse with sutures) of the fibrous capsule (Delbet[3]). This variant presents technical difficulties because of

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the friability of the capsule.

Capsulorraphy has its application for small or medium-sized sterile cysts. If there is any doubt of the sterility of a cyst, then omentoplasty or marsupialization is preferable.

3. *Omentoplasty:* It is generally accepted that for small and medium-sized sterile cysts the proper treatment is evacuation of the parasitic cyst and complete closure of the fibrous capsule belonging to the liver (capsulorraphy). But if the cyst is old, contaminated or too large, or if it communicates with the biliary system, the fibrous capsule is thick, as well as poor in both vessels and living cells, so that healing processes are limited and fistula results.[4]

Goinard proposed the use of neighboring omentum to fill up the remaining fibrous cavity after removal of the parasitic cyst. The omentum is introduced into the cavity and sutured to the periphery of the fibrous capsule with interrupted chromic catgut sutures. This procedure is called omentoplasty.

Before Goinard, Mauclaire[5] in 1903 reported a case in which he used a free omental graft to obstruct a biliary fistula after marsupialization of an echinococcus cyst of the liver.

The omentum has many advantages for defense and reinforcement. By virtue of its rich vascularity, it is able to absorb effusions. If the omentum is too short, it is advisable to incise it in such a manner as to make a pedicle, care being taken to preserve the blood supply lest necrosis take place.

In our cases, as a rule, we performed omentocolic separation. After the separation we prepared a satisfactory pedicle, with which we were able to fill even cysts of the diaphragmatic surface of the liver. It is important to avoid tension.

For cysts of the diaphragmatic surface of the liver one can introduce the omentum into the cyst by a counteropening in the inferior portion of the cyst wall. In the presence of two or three separate echinococcus cysts of the liver it is possible, with a well-developed omentum, to divide it into two or three pedicles, one for each of the cysts.

Goinard, in his first cases, drained the cavity by means of a small rubber tube, using this tube for the insertion of antibiotics. Later he found this unnecessary.

Omentoplasty is indicated (a) for large sterile cysts and (b) for the contaminated cysts and/or those communicating with the biliary system. It is also indicated if it is necessary to reoperate on a previously marsupialized cyst. Capsulectomy under these conditions is extremely difficult.

Criticisms of omentoplasty are as follows:

1. It is not always technically possible; e.g., for cysts located in the diaphragmatic or posterior surface of the liver.

2. The cavity is often not completely filled by the omentum, or the omentum has become atrophic and a residual cavity remains (Imperatti, Vergoz[3]).

3. The change in the anatomic position of the omentum may cause gastrointestinal disturbances.[2] Also, if the duodenal ulcer occurs as a complication, the roentgen diagnosis is inaccurate and confusing. If another operation in the upper part of the abdomen is necessary, the adhesions encountered are troublesome.

For these reasons the use of free omental grafts has been suggested.[2] Interestingly, the placenta has been successfully used for this purpose.[6] In our opinion, with proper detachment of the omentum from the transverse portion of the colon, it is possible to obtain a pedicle long enough to fill even cavities of the convexity of the liver. By using this procedure we have secured a pedicle long enough to prevent tension or traction on the stomach or duodenum. A follow-up of our opera-

tive cases has shown satisfactory results over variable periods.

4. *Capsulectomy:* Vigneron[7] in 1895, Napalkow[8] in 1925 and Melnikow[9] in 1936 advocated surgical "exeresis"—excision *in toto,* including the pericystic fibrous capsule (owing to tissue reaction) without preliminary evacuation of the parasitic cyst. This method was known as "echinococcectomy." They proceeded in this technic by cutting close to the capsule through the liver parenchyma. Their theory was that recurrence of this condition was due to infiltration of the capsule by scolices. This was an erroneous opinion. Infiltration of the capsule is rare (Déve[10]). Removal of the thick capsule, however, is desirable for good healing, although because of the excessive bleeding at the time of operation, the consensus has been against it.[11]

Recently, Constantini[11] modified this method considerably and proposed the term "cystectomy." Others preferred "pericystectomy."[3] It is our opinion that "capsulectomy" might be a better term. The technic of capsulectomy is based on the particular structure and the physiopathologic properties of the fibrous capsule. This capsule is made of several stratified layers which absorb calcium salts in greater concentration at the inner layers,[1] thus the outer layer is pliable and collapsible.

A plane of cleavage exists between the outer and inner layers and can be used with benefit for removal of the thicker inner layers of the fibrous capsule, without entering the liver parenchyma. The steps of capsulectomy are as follows: (a) removal of the parasitic cyst (evacuation) and (b) extirpation of the inner layers of the capsule, with use of the periosteal elevator. Capsulectomy is indicated for old infected cysts. These cysts usually are enclosed in a sclerotic or, even more frequently, in a calcified fibrous capsule.

If they are too large or near the hilum of the liver, capsulectomy presents technical difficulties and dangers, and Mabit[12] has suggested extirpation of those parts of the fibrous capsule which can be removed without difficulty or danger. Capsulectomy is not indicated for cysts communicating with the biliary system.

Goinard's suggestion[4] is that the cavity remaining after removal of a calcified cyst might be filled by omentoplasty. Such a happy combination of capsulectomy and omentoplasty brought about excellent results in 3 cases reported by Bourgeon and Molonguet.[13] In the presence of an old infected cyst the application of either capsulectomy or omentoplasty depends on the following factors:

1. Whether or not the cyst is in communication with the bile ducts. If it is, omentoplasty instead of capsulectomy is indicated. Indeed, it has been demonstrated cholangiographically (Bourgeon and his associates[14]) that in such cases, even after complete healing of the cavity, there are persistent dilatations of the communicating bile ducts. These dilatations were compared by these authors,[14] to bronchiectasis and are the predisposing factor in the frequently occurring cholangitis. Our opinion is that omentoplasty prevents complete collapse of the cavity and subsequent traction and dilatation of the biliary ducts.

2. Whether or not the cyst is calcified. In the presence of a calcified medium cyst, capsulectomy is recommended.

3. The dimension of the cyst. Capsulectomy is usually difficult with large intrahepatic cysts.

4. The topographic location and anatomic relations. Sometimes capsulectomy is a dangerous procedure near the hilum.

5. The patient's general condition.

6. The skill of the surgeon.

There are several objections to capsulectomy. Vergoz's[2] opinion is that capsulectomy is nothing more than a "delamination" and a variant of marsupialization. Indeed, Constantini himself[11] stated that tamponade of the remaining cavity is necessary. Other objections to this method are that its indications are limited to calcified and superficially located cysts.[16]

5. *Partial Hepatectomy:* Cases have been reported (Imperatti[3]) of partial hepatectomy performed as a radical operation for echinococcus cysts of the liver. In this operation the involved segment of the liver is removed with the electric knife to minimize excessive bleeding. Nevertheless, packing is still often necessary. In our opinion this procedure, except in cases of pedunculated cysts or cysts with small base, is dangerous.

6. *Lobectomy:* Recent concepts of the anatomic aspects of the hepatic vessels are of practical value.[16] Ligation of the vessels after proper dissection makes possible the excision of a lobe without excess bleeding. Lortat-Jacob and Robert[16a] stated that for certain large calcified or multiple cysts or the right lobe lobectomy is better justified than is capsulectomy. Capsulectomy in such cases, according to these authors, is a dangerous procedure, and they mention a case of fatal capsulectomy due to uncontrollable bleeding.[16a]

Seneque and his colleagues reported a left lobectomy for multiple hydatic cysts of the liver. Indeed, this radical procedure seems to us justified in multiple cysts located in one lobe. We must mention here Imperrati's and Vergoz's[15] opinion that lobectomy is too radical for a benign lesion, such as echinococcus disease. With this procedure, functioning liver parenchyma is sacrificed.[3] This method is justified when there is residual dilatation of the bile ducts when the cysts communicate with the biliary system, and its associated complications. We may compare this to the complicated echinococcus cysts of the lungs, in which case lobectomy is indicated to obviate the possibility of resulting bronchiectasis.

Use of Antibiotics: In reference to the use of antibiotics, we think it worth while to mention here the following observations:

In capsulectomy, by which the fibrous capsule is removed, the parenteral administration of antibiotics is effective because antibiotics are able to reach the cavity in a sufficient quantity. On the other hand, if the fibrous capsule is not removed, it is an impenetrable barrier to antibiotics because of its thickness and poor vascularity. Therefore, when the fibrous capsule has not been removed it is better to apply the antibiotics locally by introducing them into the cavity before closure.

In omentoplasty our procedure is a combination of local application and parenteral administration of antibiotic. The latter is effective because of the rich vascularity of the omentum. Ten cases of our own are herewith reported. Another way is by the subcostal incision (Vergozard Kourias[2]). We use this approach for the cysts that can be located in the anterior and inferior surface of both the right and/or the left lobe. Our opinion is that with this incision, which can be extended in either direction, we are able to explore as well as to treat.

For cysts located in the diaphragmatic surface the usual approach is either thoracic (transpleural) or, if necessary, thoracoabdominal.

For cysts of the posterior surface, the lumbar approach is sometimes indicated.

B. *Description and Evaluation of Different Methods.*—1. *Marsupialization:* The classic treatment of echinococcus cysts of the liver is marsupialization of the capsule after removal of the parasitic cyst, previously irrigated with a 2 per cent solution of formaldehyde. This method has proved

to be unsatisfactory, however, when applied to large infected cysts or cysts communicating with the biliary ducts. Chronic fistula, suppurative or biliary, and hepatitis usually complicate this method. The late mortality rate of marsupialization varies between 10 and 15 per cent.

A variant of marsupialization is closed drainage of the cavity by means of a Pezzer catheter and the application of continuous suction. This method is indicated especially for large cysts that are infected or in communication with the biliary ducts. With this procedure the postoperative time required for recovery is reduced to an average of forty-five days.[2]

REPORT OF CASES

CASE 1.—K. A., a white woman aged 65, had a large cyst in the right lobe of the liver with turbid fluid. Omentoplasty was performed on Jan. 30, 1953, and the patient was discharged on February 15. Results: good.

CASE 2.—B. N., a white man aged 50, had an extremely large cyst of the right lobe of the liver communicating with the biliary system. Omentoplasty was performed on Aug. 6, 1952. The patient was discharged on Aug. 22. Results: good.

CASE 3.—T. K., a white woman aged 30, had a high fever and a purulent cyst of the hepatic lobe. Omentoplasty was performed on Sept. 8, 1952. The patient was afebrile four days later and was discharged on October 4. Results: good.

CASE 4.—K. E., a white girl aged 16, had a purulent cyst of the right hepatic lobe. Omentoplasty was done on Sept. 6, 1952. The temperature was normal ten days later and the patient was discharged on September 26. Results: good.

CASE 5.—B. A., a 50-year-old white woman, had a large cyst in the right lobe of the liver and a medium-sized left lobar cyst communicating with the bile ducts. Simultaneous omentoplasty was performed on the two cysts and the patient was discharged twenty days after the operation.

CASE 6.—M. H., a white boy 11 years old, had two cysts in the right hepatic lobe, communicating with the biliary ducts cysts. Simultaneous omentoplasty was done on the two cysts, and the patient was discharged on December 3.

CASE 7.—N. S., a 57-year-old white woman, had a cyst in the right lobe of the liver communicating with the biliary system. Omentoplasty was performed on Nov. 20, 1952, and the patient was discharged on December 11.

CASE 8.—A. P., a 30-year-old white woman, had a high fever and a large cyst in the right hepatic lobe, with purulent fluid. Omentoplasty was performed on Oct. 6, 1952, and the patient was discharged on October 22. She was readmitted on Feb. 8, 1953, with a fluctuating mass at the right subcoastal margin, involving the incision. On the same day this mass was evacuated; it contained only serobiliary fluid. Drainage was employed by a fine tube, and the patient was discharged on March 22.

CASE 9.—A 12-year-old white boy had a superficial cyst of the lower surface of the left hepatic lobe. Capsulectomy was performed on Oct. 30, 1952, with complete closure of the hepatic cavity by means of through-and-through catgut sutures. There was no drainage. The patient was discharged on November 12.

CASE 10.—A white woman 55 years old had a completely calcified and purulent cyst of the right hepatic lobe, emerging just behind the bile cyst. Capsulectomy and cholecystectomy were performed on Nov. 11, 1952, with complete closure of the liver cavity by inversion and through-and-through catgut sutures. The patient was discharged on December 27.

COMMENT

We performed omentoplasty on large and infected cysts or those communicating with the biliary system and capsulectomy on superficial or calcified cysts. In all our cases of omentoplasty we used the method of detaching the omentum from the transverse colon.

Constantini's method is to tamponade the remaining defect after capsulectomy. In our own 2 cases of capsulectomy, we were able to eliminate the use of tamponade successfully. This is not always possible; indeed, it is sometimes dangerous. In all our cases the postoperative course of the patients was uncomplicated

and satisfactory. The average time required for recovery was twenty days. All our patients are in good condition at the time of writing.

ZUSAMMENFASSUNG

Die Grundsätze und Indikationen verschiedener Methoden der Behandlung von Echinokokkuszysten der Leber werden erörtert. In ausgewählten Fällen sind die Netzplastik und die Kapselentferung die Methoden der Wahl. Die Verfasser berichten über acht eigene Fälle, bei denen die Netzplastik und über zwei, bei denen die Kapselentfernung durchgeführt wurde, und erörtern ihre Erfahrungen.

RIASSUNTO

Vengono esposti i vari metodi di cura dell'echinococco del fegato, con le relative indicazioni. In casi scelti l'omentoplastica e la capsulectomia rappresntano il metodo di elezione.

Vengono presentati 8 casi personali curati con omentoplastica e altri due casi con capsulectomia.

RESUMEN

Se discuten los principios de los métodos de tratamiento para los quistes equinococcicos del hígado. Los métodos de elección en los casos seleccionados son omentoplastía y capsulectomía. Se comunican y discuten ocho casos de pacientes tratados por omentoplastía y 2 con capsulectomía.

RÉSUMÉ

Les principes des différentes méthodes de traitement des kystes hydatiques du foie, et leurs indications, sont discutés. Omentoplastie et capsulectomie sont les méthodes de choix dans des cas sélectionnés. Huit cas personnels où les patients sont traités par omentoplastie et deux par capsulectomie sont reportés et discutés.

SUMARIO

Os princípios dos diferentes métodos de tratamento dos cistos equinocócicos do fígado são discutidos, com suas indicações. A omentoplastia e a capsulectomia são métodos de escolha em casos selecionados. São apresentados 8 casos pessoais em que os pacientes foram tratados por omentoplastia e 2 em que a capsulectomia foi executada.

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Section on
Ophthalmology and Otorhinolaryngology

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Special Ophthalmologic Section Honoring
Otis R. Wolfe, M.D., F.I.C.S.
1885-1954

Editorials

Ophthalmology Comes of Age

THIS issue of the Journal of the *International College of Surgeons*, dedicated as it is to the memory of an honored colleague in ophthalmology, Dr. Otis R. Wolfe, is significant also in another sense. It marks the coming of age of ophthalmology in the College.

The desirability and potential value of special Sections within the College became apparent almost at once after the College was founded, but the creation of such Sections, naturally, had to wait until the College itself had made its calling and election sure, so to speak. Any new venture, and especially one representing so definite a departure from contemporary thought and opinion as was represented by an International College of Surgeons in the year 1935, is confronted with innumerable problems—problems of policy, of organization, of constitution, of qualifications for membership, of standards and criteria for different levels of affiliation, of winning recognition and establishing relations with other professional groups, of selecting suitable leaders, and of answering, in such a way as to secure perpetuation of the founder's original ideas and ideals, ten thousand other questions of importance. It is not an overnight task.

The Section on Ophthalmology and Otorhinolaryngology has the honor of being the first special Section organized within the College. Since the day of its origin this Section has contributed increasingly, and with increasing effectiveness, to College activities, to the programs of the successive Congresses and to College publications. The recent establishment of a special *Journal* section we can

regard as a recognition of our efforts and a challenge to future endeavor. The special section in this issue, though restricted in Dr. Wolfe's honor to ophthalmology alone, is one we take great pleasure in presenting. Let the papers speak for themselves!

PAUL C. CRAIG, M.D., F.A.C.S., F.I.C.S.

The mind attaches itself from indolence and from constancy to whatever is easy and agreeable to it. This habit always sets limits to our knowledge, and no one ever took the trouble to enlarge and guide his mind to the extent of its capacities.

—La Rochefoucauld

At each minute we are obliterated by the idea and the sensation of time. And there are only two ways of escape from this nightmare, of forgetting it: pleasure and work. Pleasure amuses us. Work fortifies us. Let us choose.

—Baudelaire

A philosophic truth does not become popular until some eloquent soul has humanized it or some gifted body has translated and embodied it. Pure truth cannot be assimilated by the crowd; it must be communicated by contagion.

—Amiel

The calm or agitation of our temper does not depend so much on the important events of life, as on an agreeable or disagreeable adjustment of little things which happen every day.

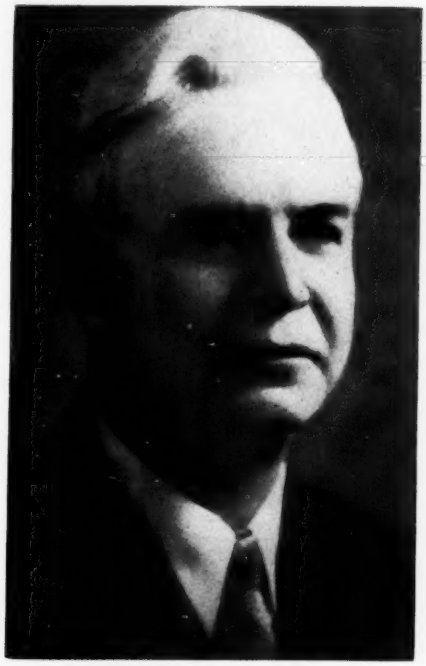
—La Rochefoucauld

Otis R. Wolfe, M. D., F. I. C. S. (1885-1954)

A Tribute

IN THE passing of Dr. Otis R. Wolfe, distinguished ophthalmologist and beloved Fellow of the International College of Surgeons, the Section on Ophthalmology and Otorhinology has lost a leader and the College one of its most indefatigable workers. Dr. Wolfe was an ardent proponent of the College ideals and a most enthusiastic participant in all College activities.

Otis R. Wolfe was born in Canton, Illinois, of English, Scotch and Irish forebears. He was graduated in medicine from the Kansas City Medical School and at one time was associated with Dr. Casey Wood and his staff. He studied at European clinics and also with Prof. Ignacio Barraquer in Barcelona. He founded the Wolfe Eye Clinic in Marshalltown, Iowa, the seat of his practice from 19 until the time of his death. In addition to his Fellowship in the International College of Surgeons, he was a member of the American Medical Association, his own state and county medical societies, the American Academy of Ophthalmology, the Association for Research in Ophthalmology, the Pan-American Medical Association, the American Medical Editors' and Authors' Association, and the Iowa Academy of Science. He was Chief Surgeon of the Eye Department, Evangelical Hospital, Marshalltown, from 1930 until the end of his life. Within the College, he was active in founding the Section on Ophthalmology and Otorhinolaryngology, serving it as Secretary-Treasurer and later as President. He was also Secretary of the newly founded World EENT Section of the College. He lectured in Europe and South America as well as in the United States and published many significant articles, especially on cataract and, of late years, cataract in children, in the treatment of which he was outstandingly successful, and for which he devised a number of special instruments. Some years ago he established a foundation to provide for the treatment of needy persons, with special emphasis on children. He read several papers on this subject before various medical societies. His last paper was presented at the May 1945 meeting of the College in Sao Paulo, Brazil.



Otis R. Wolfe, M.D., F.I.C.S.

Though Dr. Wolfe was an ophthalmologist of the highest type and enjoyed a very large practice—patients were brought to him from every state in the Union—he was a modest man, shunning praise and publicity and hewing straight to the line so far as his responsibilities, personal and professional, were concerned. In the early days of the College, since he lived in a city somewhat remote from the large medical centers and universities, he found himself handicapped in organizing and furthering College work in his own locality and therefore enlisted the help of a number of his colleagues to secure the listing of speakers on ophthalmology and otorhinolaryngology on Congress programs in Mexico City, Detroit and Chicago. The specialists who participated as a result of this effort became intensely enthusiastic and, together with Dr. Wolfe, petitioned the Executive Council for permission to organize a Section on Ophthalmology and Otorhinology within the College. On receiving the grant, they founded the first section on a surgical specialty to be organized in the College.

Dr. Wolfe was loved and respected by all who knew him. He and his devoted wife, Eunice, had four sons: Otis D., Russell M., Henry L. and Paul W. Wolfe. All survive except the youngest, Paul, who was lost at sea during World War II. At the time of his enlistment Paul Wolfe had had two years of medical training. The other three sons are surgeons specializing in ophthalmology.

I knew Dr. Wolfe for many years and had the pleasure of working with him in the formation of our Section. Close association with him in directing its activities and preparing its scientific and clinical programs more than confirmed my original impression of his sterling character and his professional worth. A refreshing sense of humor, coupled with an admirable disposition, carried him through many difficult situations. His delight, and at the same time his humility, every time he succeeded in restoring sight (and thereby intelligent perception and opportunity) to a child handicapped by congenital blindness, were most moving. His life fulfilled the criterion set forth by Horace Mann: "Be ashamed to die until you have won some victory for humanity."

OSCAR B. NUGENT, M.D., F.A.C.S., F.I.C.S.

The sense of sight is indeed the highest bodily privilege, the purest physical pleasure, which man has derived from his Creator.

—*Smith*

Traumatic Cataract Surgery in Children

Needle-Hook Technic

OTIS R. WOLFE, M.D., F.I.C.S.†

MARSHALLTOWN, IOWA

I BEGIN this article by making a plea for earlier attention to surgical consideration of cataract resulting from injuries to children and young adults. We frequently encounter patients with a history of a blow or a penetrating corneal wound from which partial or total loss of vision has occurred. These patients usually state that they visited a physician until the traumatic inflammation cleared, and then accepted the final blind eye situation as "just too bad" but inevitable. The tendency of the laity and many members of the medical profession has been to accept the situation philosophically and in effect to say to these patients, "You are lucky that the accident involved only one eye and that you have a good one remaining." They know that the child will never have two perfect eyes again, i. e., with binocular vision.

As an ophthalmologist, whose first precept should be conservation of vision, one should analyze every such case and advise the patient for future maintenance of maximum visual function. What is often not considered is whether partial vision can be salvaged in the injured eye. Even though binocular vision cannot be reestablished, partial vision is better than none. The child can have a quiet part-seeing eye as insurance against total blindness should accident or diseases ever affect the other eye. A quiet part-seeing eye is also much less apt to cause sympathetic ophthalmia.

It is highly important, therefore, that salvage operations be performed early, while the retina still retains good function and before secondary glaucoma occurs or atrophy and softening set in. This sentence contains the main thought of this paper.

Frequently, it is not even advisable to wait until all traumatic inflammation has subsided, especially if synechiae exist. Many eyes do not long tolerate having the anterior chamber sealed off from the posterior chamber without showing incipient deterioration. As soon as the corneal wound is well closed, the lens substance is removed[1] by the Wolfe double suction cannula technic (Figs. 1 and 2). The keratome incision for this should be at the limbus, as far away from the wound as possible. Iridectomy is advisable if the pupil is small or synechiae are present and preventing dilatation. The better the pupil is preserved, the fewer synechiae are present and the smaller the amount of iris tissue lost, the better the prognosis. A part-seeing eye is also less apt to become a sympathetic nerve irritant to the remaining good eye.

The consequence of any penetrating ocular injury is usually cataract, although contusion without actual penetration may also cause cataract.

Fig. 1.—Wolfe apparatus for soft cataract. After discission of anterior capsule the double-barreled cannula is inserted into the anterior chamber through a small keratome incision. Mouth suction draws lens into glass trap. Fluid is injected from rubber bulb, accomplishing lavage and suction simultaneously.

†Deceased.

Presented at the VIII International Congress of the International College of Surgeons, Madrid, Spain, May 20, 1952.

Reprinted from the Journal of the International College of Surgeons, July 1953.

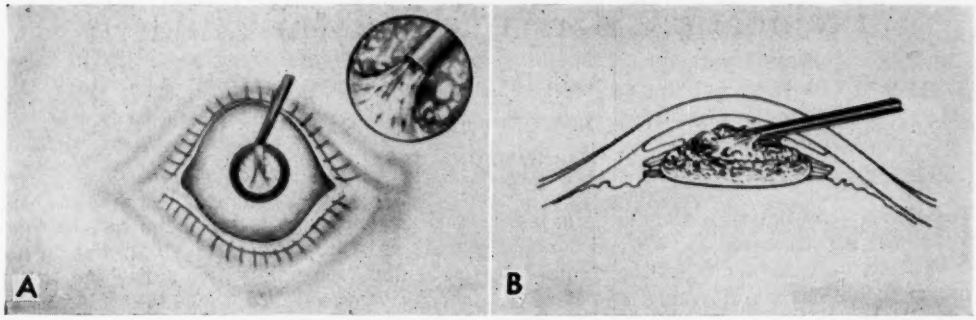


Fig. 2.—*A*, double cannula in anterior chamber, soft lens substance being sucked into larger tube. Insert demonstrates suction into glass trap. *B*, fluid injected into anterior chamber. Accomplishes lavage and suction extraction of soft cataract.

Briefly, the following syndromes are typical: *First*, a total cataract may develop, rapidly or slowly, in the contused eye. Penetrating corneal wounds affecting the lens capsule may heal over, but the lens will sooner or later become cataractous. The description of the mechanisms involved in this process require too much detail to be covered in a paper devoted largely to the surgical phase. *Second*, the eye may remain chronically inflamed and show continuing inflammation, from which a secondary glaucoma may result. *Third*, the inflammation, as a result of trauma to the uveal tract or the presence of blood in the vitreous, may be followed by hypotony and atrophy. *Fourth*, rupture or penetration of the lens capsule may result in partial or complete absorption of the lens substance, with exudates, adhesions and scar tissue formation as a result of the trauma and inflammation. If the pupil has not been kept well dilated, this is a serious condition and the one for which I would particularly urge early surgical consideration. One is then confronted with a secondary or membranous cataract, the condition most frequently observed after penetrating injuries. *Fifth*, sympathetic inflammation may involve the other eye; this is the most serious complication and the greatest danger. *Sixth*, detachment of the retina and pathologic vitreous may be present.

The danger associated with the fifth and sixth points has possibly been overemphasized. It is pertinent, but in my opinion many eyes have been removed that might have been saved by early salvage operations as herein described.

The complications and traumatic end results are so varied and numerous that they are mentioned only in the foregoing six points. I shall discuss the main types of cases that are encountered at this clinic. They are chiefly the ones in which the inflammation has subsided.

The basic principles that concern the ophthalmologist and should be kept uppermost in his analysis of the case are, first, to not let one poor eye ruin the good eye. This is logical, but neglect of it has caused many eyes to be removed that might have been saved for partial visual function. Of course, if the injured eye cannot be freed of ciliary inflammation and become a quiet eye, enucleation must be considered. The younger the patient the more applicable is this statement, although I have seen only a few persons with true sympathetic ophthalmia resulting from old injuries. Such ophthalmia does occur, however, and is an ever-present danger that cannot be safely discounted.

If the injured eye is to be retained, an effort should be made early to restore it, first to obtain a seeing eye if possible and at least a quiet eye. Unless circulation is restored between the anterior and posterior chambers, the eye will sooner or later deteriorate and be neither a seeing eye nor a safe quiet eye.

Traumatic conditions of the eye may be thus classified for a new surgical procedure not heretofore described:

A. Total cataract with the capsule intact.
B. Rupture of the capsule with all or part of the lens absorbed.
C. Iris adhesions, exudate and a membranous cataract.

Class A.—For children and young adults with total cataract, thorough examination (particularly slit lamp analysis) is advised, to determine whether the lens substance is still soft. If the lens is soft or semisoft, the Wolfe double-barreled cannula suction technic[1] (Fig. 1) is indicated; it enables the surgeon to remove the cataract by a minor surgical procedure with minimal danger of further trauma to the uvea. If the retina is undamaged, a fair to good prognosis can be made. In such a case, the Wolfe suction technic can be as effective for traumatic as for congenital cataract.[1] In cases of congenital cataract the percentage of favorable results has been raised into the 90 per cent bracket, as compared to about 50 per cent with the old needling method. If the lens is not soft, the capsule is intact and no synechiae exist. Some intracapsular technic (preferably the Barraquer) is considered.

Classes B and C.—It is to these groups that special attention should be directed. A surgical procedure I have used for many years, with highly satisfactory results, is here presented.

It is often a difficult matter for the ophthalmic surgeon to restore circulation between the anterior and posterior chambers of an old injured eye, because the lens capsule has been ruptured and part of the lens absorbed, leaving a shallow anterior chamber with adhesions and synechiae. Exudate and scar tissue have formed in the remains of the anterior capsule, with adhesions to the iris or cornea, and are present in various stages. If the lens has been partly absorbed, a heavy sclerotic posterior membranous cataract may exist, and a regular needling will not suffice. It is difficult to determine what is capsule and what is exudate. If

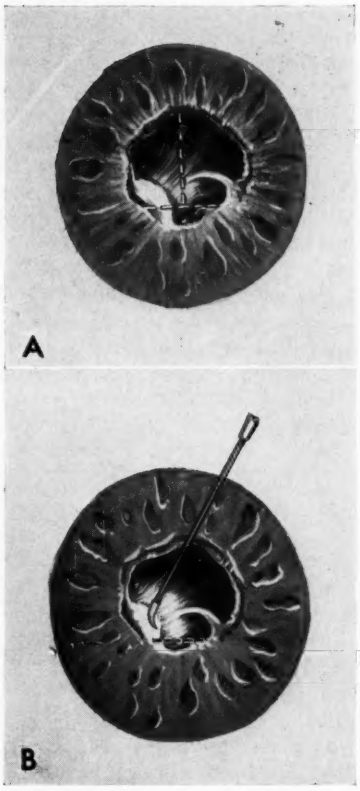


Fig. 3.—*A*, Wolfe cycle-shaped knife needle is passed through cornea at 12 o'clock. The cut should follow the dotted first horizontal 3 to 9 o'clock. In the second step it is swept upward from 6 to 12 o'clock. If a good central opening results, the operation is here terminated. *B*, situation in which the upward cut by Wolfe knife is not sufficient and the resulting opening is not central or adequate. The second stage of the procedure is then performed with the blunt hook.

the iris is incarcerated with no functioning pupil, the Zeigler knife through-and-through technic has shown some good results, but in many cases neither of these technics is adequate. The Wolfe cycle-shaped knife needle technic (first step), here illustrated, is efficient and may be adequate if the membrane is thin (Fig. 3*A*).

If occlusion or seclusion of the pupil

exists, surgical measures should be quickly employed, as frequently the eye deteriorates and softens rapidly, the prognosis becoming progressively poorer. These conditions are generally difficult to handle and of varying degree. Complications, particularly hemorrhages, are frequently encountered, making the surgical procedure more intricate. If operation is employed in a case in which the condition is highly complicated, the patient should be told that it is a salvage operation, with everything to gain and nothing to lose. A defeatist attitude on the part of both surgeon and patient is often encountered and is not justified. The patient, parents or family should be fully acquainted with the facts and willing to chance a salvage operation.

Surgical Technic.—I herewith submit a planned surgical technic that may be partially or wholly employed. It has been very satisfactory in cases of Class B and Class C. I have used this combined knife-needle-hook procedure for many years and found it adequate in most cases. It is a comparatively simple procedure, and it frequently saves the surgeon from subsequent needlings or major surgical procedures. The surgeon should plan the entire procedure. It may be utilized only partly (Fig. 3*B*) should the capsule prove to be one that can easily be opened without strands of capsule remaining in the center of the pupil.

For young patients (without increased tension) the procedure is as follows: The curved knife needle is introduced at the limbus (Fig. 3*A*). The knife needle point is then jabbed through the membrane as low as possible and turned to cut from 3 to 9 o'clock to open and release the membrane below. The second action is to slit the membrane from 6 to 12 o'clock, using a positive sweep of the knife from below upward (Fig. 3*B*). Here the curved knife needle will sever many membranes where the straight one will not. If a good opening results, the operation is terminated. Sometimes, instead of cutting, the membrane stretches or tears and does not clear the middle of the pupil. The surgeon keeps this in mind, and if the membrane cannot be severed satisfactorily the knife needle is used to enlarge the corneal incision as it is withdrawn, making about a 2.5 to a 3 mm. opening. The Wolfe blunt hook is then introduced, and the membrane is caught below and withdrawn wholly or cut

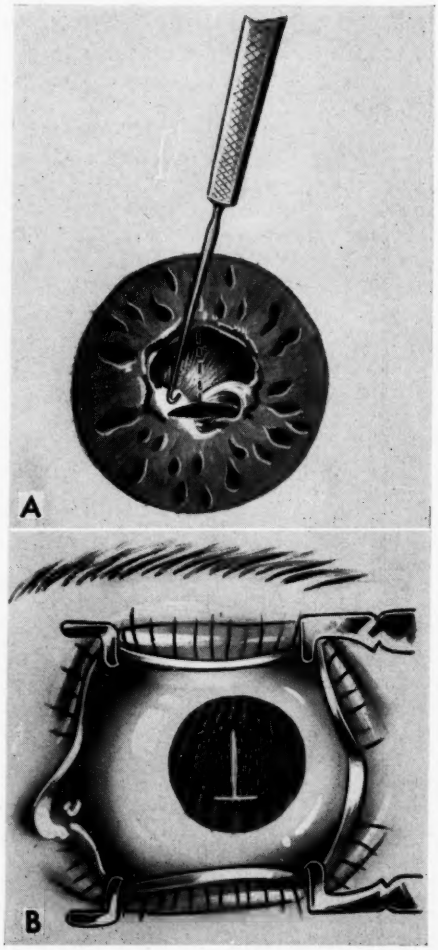


Fig. 4.—*A*, Wolfe curved knife in anterior chamber, through limbal incision. First cut is made as low along dotted line as possible. Then knife is turned with tip pointed back and an upward sweeping cut is made. *B*, opening in capsule to be desired; if obtained with Wolfe knife, first step is adequate for visual function, as capsule will shrink further.

off if prolapse of the iris occurs (Figs. 4*A* and 5*A*). If the membrane slips or is difficult to engage, the hook is turned and twisted, and this will usually hold the partly severed membrane that might otherwise slip away (Fig. 5*B*). If a corneal adhesion is present and the iris strand is far enough away from the periphery to allow

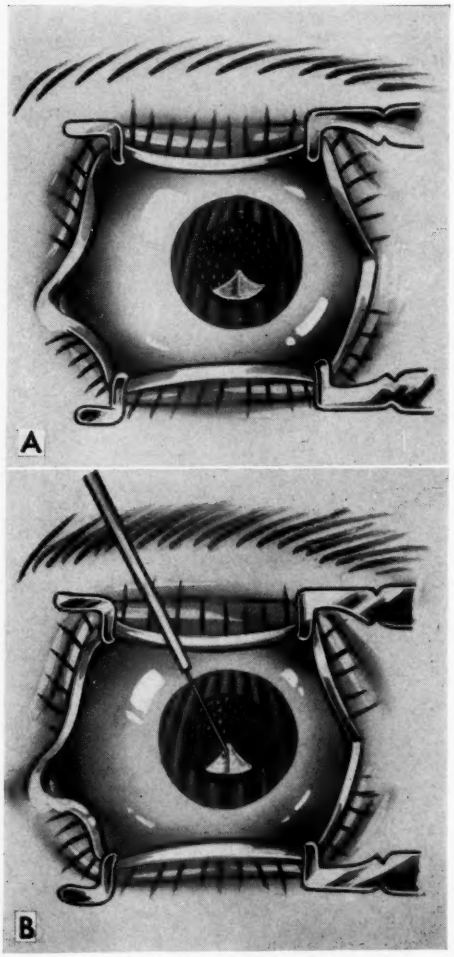


Fig. 5.—*A*, author's blunt hook introduced through corneal incision. Hook catches membrane and is drawn up, tearing it or drawing it out through corneal incision. *B*, hook catching upper margin of an inadequate opening from knife incision of tough membrane. Hook breaks it or draws it out through the corneal incision.

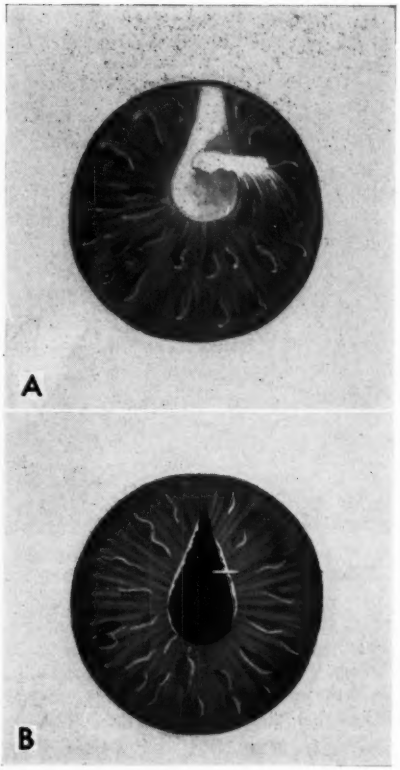


Fig. 6.—*A*, case of A. H., a 5-year-old girl. Icepick penetrated cornea at site of scar. Total cataract with iris adhered to cornea. Very disfiguring. Light perception only. *B*, final result of operation for totally blinding traumatic cataract. Patient has 20/30 (90 per cent) vision and an excellent cosmetic result.

the point of the curved knife to catch it without traumatizing the cornea, we sever it (Fig. 4*A*). Under these circumstances I use the highly curved cycleshaped needle (Fig. 3*B*).

There is very little reaction, and a clear black pupil is usually obtained, permitting early fundus examination. If there is any question as to whether the membrane is adequately severed, the Hildreth fluorescent lamp is used before the needle is withdrawn.

The technic is an outgrowth or continuation of a method of iris and capsule incarceration that has been employed in this

clinic for twenty years in cases of secondary glaucoma. It is used for incarceration of capsule, or iris, which acts as a seton to allow external drainage for secondary glaucoma following extracapsular cataract operations. The incarcerated capsule does not absorb, but gives continual subconjunctival drainage. This technic was reported in the *American Journal of Ophthalmology*.[2] The use of the blunt hook was fully described, and its employment for external drainage is still recommended. Mechanically it is essentially the same, except that a keratome incision is made under a conjunctival flap.

REPORT OF CASES

CASE 1.—A. H., aged 5, of California, was referred to this clinic by her uncle, an unusually competent optometrist. Several months before she came to us she was punching a hole in a doll's shoe with an icepick, which slipped and penetrated the left cornea. An ophthalmologist treated the eye, keeping it dilated for several weeks. The child had little pain and only a small amount of inflammation, but after the inflammation had subsided it was discovered that she could see very little. The parents consulted several ophthalmologists, most of whom offered no solution to the problem, and one of whom told them that eventually the eye would have to be enucleated.

The patient was an unusually beautiful child except for the easily apparent white lens opacity. She was well nourished and had made normal progress in school. She had a high intelligence quotient. Examination showed the right eye to be normal, but with the left eye she was able to demonstrate only finger motion on the temporal side with good light projection. Objective examination revealed a very small pupil, completely immobile, with a corneal scar just above and to the right of center, and heavy iris adhesions to the corneal wound (Fig. 6*A*). There was complete seclusion of the pupil, with no reaction whatever to atropine. The lens capsule had been ruptured but had healed.

Three distinct surgical procedures were performed as outlined. The first step was severing of the iris strand that adhered to the cornea. Second, the iris was dissected free from the lens capsule, and this was followed by discission of the lens. The third and last step was aspiration of the lens substance by the Wolfe double cannula technic. Several pieces of calcareous lens nucleus required removal with forceps. The greatest postoperative problem was considerable hemorrhage from the blood vessels of the iris. The pupil was kept well dilated, the blood was gradually absorbed, and the iris was found free. The patient obtained 20/30 corrected vision after hyperemia resolved (Fig. 6*B*). Two years later the eye showed a small thin cyclitic membrane which may later require discission, but the patient still has 20/40+ vision. Fundus examination reveals no abnormalities. There is no deviation.

The most gratifying phase of the entire case, however, is the cosmetic result (Fig. 7). The eye continued soft for several days after the operation, but at the time of writing it

Fig. 7.—*A*, case of A. H. Note excellent cosmetic result one year after operation for traumatic cataract. 20/30 vision. *B*, left eye after suction of cataract operation. Left eye looks normal except for slight irregularity of pupil. Corneal scar is shrunken so that it is scarcely visible.

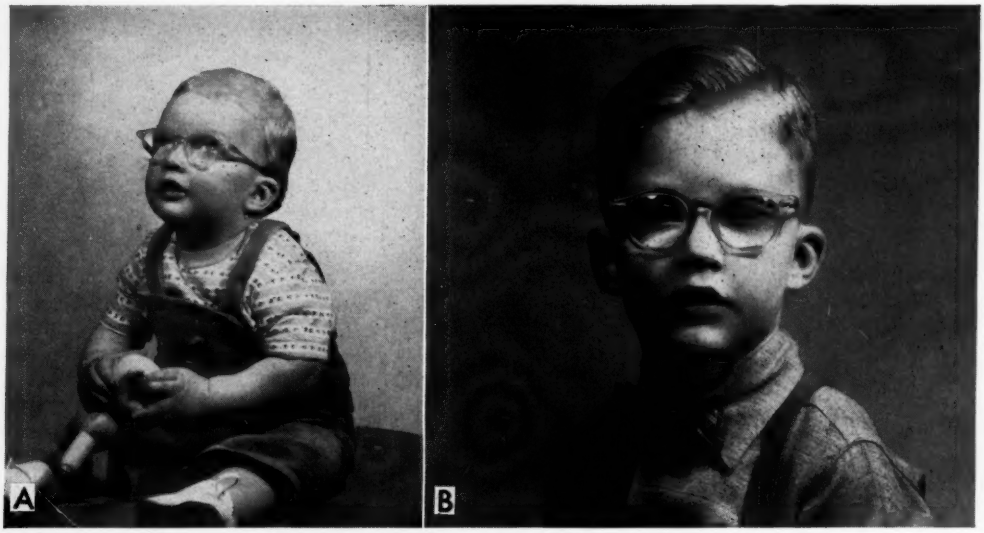


Fig. 8.—*A*, case of R. C. (R. C., Micropthalmus; total white cataract). Operation was performed when this child was 5 months of age, because of total blindness. First the suction technic and then the pupillary membrane knife hook technic was used. Photograph taken at the age of 1½ years. *B*, R. C. at the age of 3 years. Eyes look normal, media clear. Estimated corrected vision normal. Complete rehabilitation.

seems normal to finger palpation. Without close scrutiny, one would not note any difference in the two eyes. The child has good pupillary action. In fact, the parents say that many of their friends ask which eye was injured. An aphakic correction is worn for a short time each day to keep the retina functioning. The highly intelligent parents are very grateful and feel that they have given her the best possible insurance against blindness, should any disease or injury ever affect the right eye. They are also most happy over the cosmetic improvement.

CASE 2.—R. C., aged 9 months, was totally blind, with microthalmus and complicated total cataract. Operation by the Wolfe suction technic was performed when the child was 5 months old. The media immediately cleared and glasses were prescribed, also orthoptic training (Fig. 8) two and a half years later. The eyes appear normal—clear media with normal corrected vision.

CASE 3.—(Fig. 9) R. A. was totally blind from left traumatic cataract. Six days before examination, glass penetrated the cornea external to the pupil at about 10 o'clock, leaving a heavy wound. Total white swollen cataract was present, with capsule and free lens in the anterior chamber. The pupil dilated well. Operation was performed by the Wolfe double cannula suction technic with peripheral iridotomy. The entire lens was aspirated, the posterior capsule being retained. The next day there was a clear black pupil. Very little operative reaction was encountered. Convalescence was rapid. On the fifth night the eye was struck and there was some bleeding, but the blood was absorbed by the tenth day. The pupil was slightly irregular. Two months later the knife - needle - hook technic (herein described) was employed on the posterior capsule, which had become opaque. The result was 20/15 vision. Normal vision was obtained by orthoptics and refraction. Both the cosmetic results and the visual rehabilitation were good.

SUMMARY AND CONCLUSIONS

To prevent amblyopia, which occurs early in children with traumatic cataract, an overall plea for early operation is made. The author's suction lavage technic is used for soft traumatic cataracts with intact capsule. A new knife needle hook technic for secondary or membranous cataract is submitted. It can be used com-

pletely or partially to eliminate any pupillary membrane. Several illustrations and histories showing original observations and later visual rehabilitations are presented.

RIASSUNTO E CONCLUSIONI

Si raccomanda vivamente l'intervento precoce per prevenire la ambliopia che si riscontra molto presto nei bambini affetti da cataratta traumatica. La tecnica di lavaggio-suzione dell'autore è usata per le cataratte traumatiche molli con capsula intatta.

Viene descritta una nuova tecnica per la cataratta secondaria o membranosa. Essa può essere usata completamente o parzialmente per eliminare ogni membraan pupillare.

Fig. 9.—R. A. Suction operation performed on traumatic cataract five days after penetrating wound. Posterior capsule retained intact. Clear black pupil resulted. Discission of posterior capsule occurred two months after the operation. Corneal scar released and shrunk. Final vision 20/15. Perfect cosmetic result.

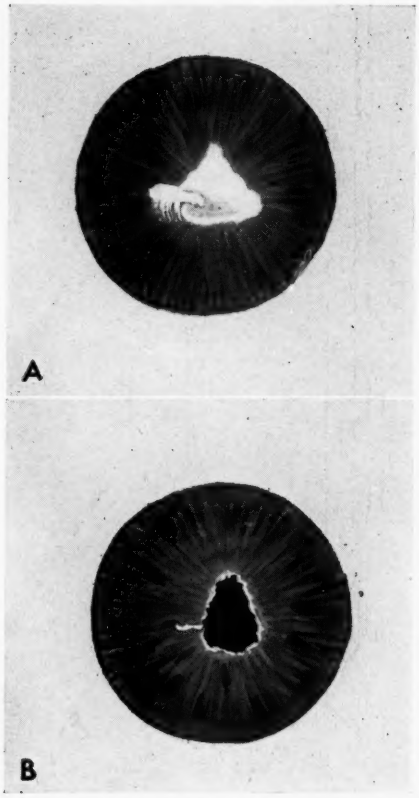


Fig. 10.—*A*, case of L. L., a young adult. Total traumatic cataract with iris adherent to cornea and to calcified lens. Cataract was loosened from iris and delivered with toothed forceps. Corneal adhesion severed at first step. *B*, same case. Note sclerotic exudate (later absorbed) adherent to iris. Posterior capsule required discission. Corneal adhesion shrunk after being severed. Near-normal vision and an excellent cosmetic result were obtained.

Vengono presentate diverse illustrazioni e storie che illustrano le osservazioni originali e la ripresa della vista a distanza. di tempo.

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Surgical Treatment of Perilenticular Membranes in Children

OTIS R. WOLFE, M.D., F.I.C.S.†

MARSHALLTOWN, IOWA

BLINDNESS in children resulting from developmental or exudative tissue, either in front of the lens or behind it, is the subject of this paper. The children whose cases are reported fall into three main groups: those with anterior pupillary membranes, those with posterior membranes, and those with retinopathies.

Small threadlike pupillary membranes are encountered rather frequently. Anterior pupillary membranes sufficient to obstruct vision are infrequent. In pupillary membranes the strands are always attached to the inner circle of the iris. I have discussed the subject with a number of experienced surgeons, and few had encountered membranes as heavy as those in Cases 1, 2 or 3. Posterior membranes dense enough to obstruct vision are encountered more frequently. They have been described by various authors as tunica vasculosa, hyaloid artery remnants, opaque hyaloid sheaths, cyclitic or exudative membranes, etc. There are also descriptions of vitreous tumors, malignant and nonmalignant, cysts, filaments with or without cholesterin crystals (synchisis scintillans), etc. They will not be discussed in detail here, however, as this paper is a presentation of clinical surgical experiences.

One common observation was conspicuous in the children who had posterior membranes; the lenses were smaller and definitely thinner than the average. This does not apply to the conditions diagnosed as secondary, exudative or cyclitic. This has been particularly true in the cases diagnosed as having hyaloid membranes. (This fact definitely suggests a retarded developmental process.) A well-dilated pupil with a good central opening through the visual obstruction, be it capsule or membrane, is the acme of surgical achievement. A concentric residual ring of membrane gives strength and support to the vitreous. If the pupillary aperture is large enough to permit slit lamp examination, one can make a fairly accurate differential diagnosis. I always attempt to analyze the lens with the slit lamp before I suck it out, but I cannot always do so with young babies and children. A small hand slit lamp is especially helpful with babies.

Before the surgeon terminates his operation for any structural obstruction, cataract or membrane, he should try to be certain that the rear drainage angle is free. When the pupil is large, the surgeon can be fairly certain that it is free. When the pupil is small, the surgeon is much less certain that the filtration angle is free than if he does an iridectomy. There is no greater safety measure than a good iridectomy, and it can be the greatest single factor in preventing secondary glaucoma. This is true especially in the cases of young children, who have a tendency to excessive formation of cyclitic exudate and scar tissue.

Some surgeons do simple needlings even when the pupils are small and "get by" with sufficient absorption to prevent blocking of the drainage angle. They do not like to risk marring the iris margins, thereby obtaining a poor cosmetic effect. The cosmetic result is important, but not of the first importance. Elimination of a soft lens is greatly facilitated by sucking out

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†Deceased.

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the lens débris rather than allowing it to absorb after a needling. Nature gives good absorption after needling in about half the cases but does it imperfectly in the other half. The surgeon does not know in advance in which case good absorption will occur with a needling alone. Why leave it to chance? It is an incomplete operation.

Good dilatation, or an enlarged pupil, is the keynote in surgical conduct of juvenile cataract. A simple needling alone should never be performed in a small pupil or in the presence of synechiae or microphthalmus. A 7 to 9 mm. pupil is highly desirable. If the pupil cannot be dilated to more than 5 mm., I definitely advise against performing a needling alone.

Free normal lens substance is always absorbable to a degree. The normal lens capsule is difficult to absorb and should be eliminated surgically, especially the zonular type. I favor opening the anterior capsule first with a cystotome, followed by a tooth forceps. Retained capsule often embraces and surrounds some of the lens adjacent to the edges of the iris. A small remnant of capsule may fold over in front of the iris or behind it. A capsular tag is not infrequently pushed into the corneal wound. The ensuing swelling of the lens substance may allow a capsular tag to come into close apposition with the edges of the iris and adhere to it, presenting a cystic appearance. These factors are true especially where there is considerable inflamma-

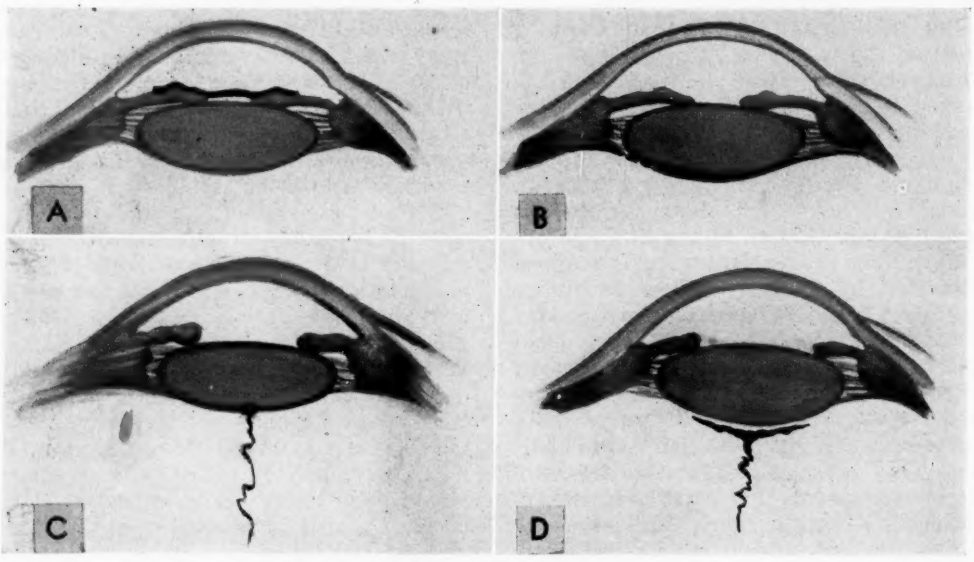

Fig. 1.—*A*, schematic drawing of an anterior pupillary membrane. Usually the membranes are only strands and do not obstruct vision sufficiently to require surgical intervention, which is advisable only when the membranes do cause partial obstruction of vision. *B*, schematic conception of a posterior polar cataract and hyaloid artery. Usually the artery remnant is small and thin like a floating thread. Unless there is a cyclitic membrane or an opacity of the hyaloid sheath accompanying it, with vision markedly reduced, surgical intervention is not advisable. *C*, schematic conception of posterior membranes, tunica vasculosa or hyaloid sheaths; or cyclitic membranes. The illustration represents individual or combined opacities and obstruction to vision encountered in the author's practice. *D*, posterior hyaloid artery and occluding membrane accompanying partial cataract (postoperative schematic conception). This type of patient is usually blind in one eye and may be blind in both. The first step is quick removal of the lens by suction (the lenses are usually thin). After the operative hyperemia has cleared, the posterior opacity is revealed and the second step, by the curved knife and hook, is performed (see technic, Fig. 3). Such lenses are usually thin, and sometimes the posterior opacity can been seen on the table with the ophthalmoscope after the lens has been sucked out.

tory reaction. The center of the pupil may even be free or open, permitting fairly good vision, and still unabsorbed capsule and lens behind the iris may block drainage from the posterior to the anterior chamber, or the filtration angle. These factors account for the not infrequent occurrence of secondary glaucoma after needlings.

An entirely different mechanical situation presents itself when a needling is performed with a widely dilated pupil or a good iridectomy. The iris is drawn away from the convex curve of the lens, and wider discission of the capsule can be performed. The lens, as it softens, is then free to push out into the anterior chamber. Fragments of the anterior capsule do not often fold over the edges of the iris. If they do, they less frequently contain lens substance and exudate, and scar tissue does not form readily. The filtration angle of the iris is not nearly so apt to be blocked, and secondary glaucoma is obviated. Patients with large pupillary apertures are much easier to deal with surgically, and here, suction removal of the lens gives the nearest to the ideal result. The zonular type (inherited) usually dilates well.

These arguments obtain particularly with the zonular type, for which I favor a two-step technic. In zonular or lamellar types, the involvement or obstructing tissue is in the lens proper. The capsule is normal and is not usually involved. Being normal, it does not absorb so readily. In either anterior or posterior capsular cataracts this may or may not be true. The capsule may, however, become very firm when it takes on exudate from trauma (surgical or accidental) or from any inflammatory process.

A clear posterior capsule at the time of operation for zonular cataract sooner or later becomes a heavy, opaque exudative membrane and is no longer merely capsular. The younger the patient, the more likely is the exudative process to occur.

It is entirely consistent to reason that this exudative process may progress, be hidden behind the iris and be overlooked while it is blocking the filtration angle.

It is far better, and on the side of con-

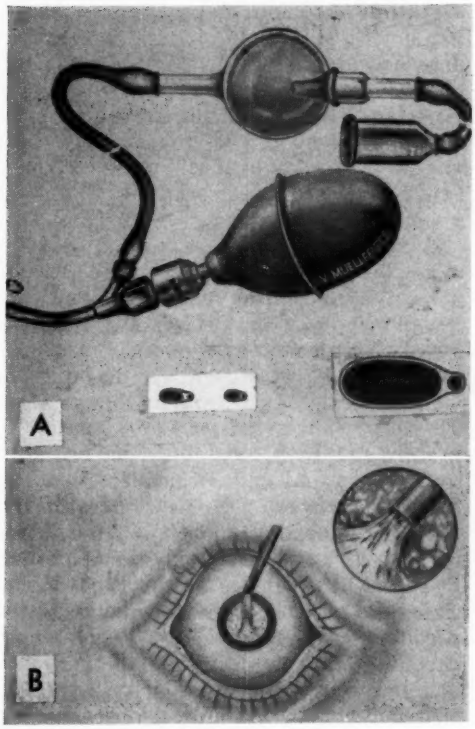

Fig. 2.—*A*, author's double cannula suction and lavage instrument. Briefly, it effects quick elimination of any soft cataractous lenses (either wholly or partly opaque) by oral suction. This quick elimination of the cataract has greatly facilitated early analysis of opacities of the posterior quadrant and of the vitreous. In cases of total soft cataract, suction is performed in one step after a capsulotomy with a Schweiger type forceps. In cases of zonular uncomplicated cataract, suction extraction is performed a few days after a classic needling. For an uncomplicated soft cataract with a well-dilated pupil, the results are well up in the 90 per cent bracket. In complicated cases, with small or poorly dilated pupils, synechiae, microphthalmus, etc., an iridectomy should be performed and, of course, the results have not been quite as good. *B*, double-barrel cannula inserted into the anterior chamber through a small corneal incision. The soft lens is aspirated through the large tube by oral suction. The anterior chamber is kept full of fluid injected through the small part of the cannula from the rubber bulb. The presence of the fluid in the anterior chamber greatly expedites the suction.

servation of vision, to perform an iridectomy, with a disfigured pupil and a free drainage angle, than to run the chance of glaucoma by trying to avoid iridectomy. It is frequently a difficult question for the surgeon to decide, because cosmetic results are very important; but continued visual function is more important and must be given first consideration.

A family history of cataract or some other disease of the eyes was present in more than half of the cases here presented. Pregnancy may have been short or full term. A cataract at a more or less advanced stage was usually present. The lenses average much thinner than normal. The posterior membranous opacity is usually not seen until the lens has been removed, so that a diagnosis is infrequently made in advance of the first operation. If the baby is totally blind, it is advisable to operate at an age as early as 6 months. Differential diagnosis of the type of posterior membrane is difficult and often impossible. There may be a thickened plastic posterior capsule, an exudative cyclitic membrane or a hyaloid opacity present to obstruct vision. After the operative hyperemia has subsided, greyish white filaments or spangles are frequently seen in the vitreous by slit lamp examination. The color distinguishes these from ordinary blood vitreous floaters. They are not threadlike and are not free in the vitreous but are attached, with one end floating free. I removed some heavy ones from an adult by the hook technic after cataract extraction several years ago. One eye softened and degenerated afterward, but the other still has fairly good vision.

Cases 4 to 17 inclusive, with their illustrations, indicate my experience with posterior membranes. The operations were largely of the nature of salvage, as there were many complications to be met. My line of reasoning is that if there is tissue obstructing vision it is incumbent upon me to try to clear the media, regardless of my inability to identify the membranous tissue beforehand. Performing iridectomies, opening membranes and removing scar tissue do not always result in a good-appearing eye. An iridectomy is, however, a great safety procedure when any kind of lens débris, tissue or exudate is present. If these exist and the surgeon works through a small pupil, he is never certain that drainage from the posterior to the anterior chamber is obtained, or that the filtration angle is free. If it is not free, hypertension may result, causing a slow, insidious noninflammatory glaucoma.

If there is a chance to clear the media and obtain useful vision by opening or removing any kind of obstructing membrane, I feel justified in operating on the basis of salvage. I do, however, have a clear understanding with the parents that I can promise nothing; such cases must be viewed from the standpoint that the child has everything to gain and nothing to lose. My results in these complicated cases are in the 50 per cent bracket.

Treatment of Retinopathies.—The mechanical removal of a cataract or the opening of an occluding membrane does not terminate the responsibility of the ophthalmologist. Except for the congenital zonular type, cataract is only one manifestation of a sick eye. In children especially, since nature has not completed the developmental process, there is frequently much that can be done to improve vision. One can often prevent or control inflammations and degenerative processes that would cause damage to the retina or the uveal tract. The ophthalmologist, the pediatrician, and the endocrinologist can well cooperate in treating retinopathies in infants. In the average case, however, the treatment must be supervised by the ophthalmologist. The parents usually consider it an "eye case" and expect the "eye man" to deliver the treatment. The ophthalmologist must, therefore, be the key man in supervising and directing treatment through proper channels. There are many factors, both inflammatory and noninflammatory, to consider, but there are few tests that give definite indications for treatment. Hereditary conditions must also be studied.

The average baby ordinarily receives

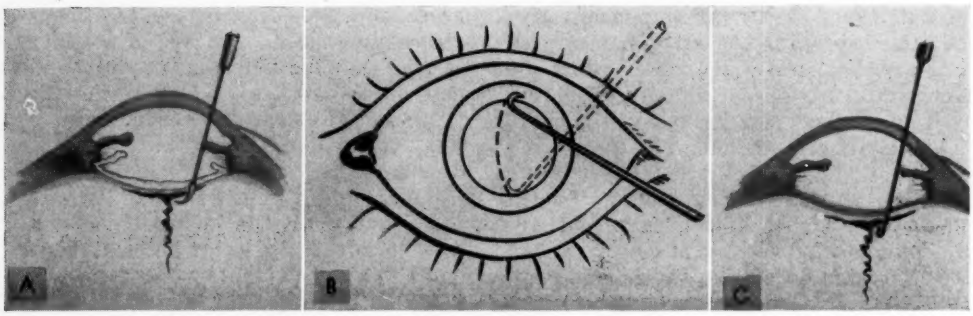

Fig. 3.—*A*, schematic illustration of the curved knife technic. The curved knife is employed after the lenses have been removed by suction and after the operative hyperemia has subsided. The knife penetrates the cornea and the posterior membrane and then makes a long clean sweep. If a good opening is obtained, the operation is terminated. If not, the author proceeds with the second step, i.e., the hook is used as in *B* and *C*. *B*, schematic illustration of the movement of the sickle-shaped hook knife through the posterior membrane. The cut shown follows an incision line from 6 to 12 o'clock but can be made in other directions. Frequently, the pupil is not as large as this, and not infrequently it is necessary to work through a ragged iridectomy following a keratome incision. *C*, optional step. If the sickle knife (*A*) does not effect a good opening, the blunt hook is introduced through the same small corneal knife opening. If necessary to permit insertion of the hook, the author enlarges the corneal opening slightly as he withdraws the curved knife. By so doing he keeps the corneal opening so small that vitreous seldom presents or escapes. The hook catches and tears an opening in the membrane, or removes a portion of it.

little attention for treatment of a retinopathy until much damage has been done. Unless a total cataract exists, demonstrated by a white pupil, the eyes, especially the fundus, are seldom seen early in life, as anesthesia is usually required for a good examination. The baby is usually about 6 months old before the parents note that there is defective vision. Crossed eyes may be noticed, but partial blindness may go without attention for a long time. Except in cases of congenital zonular cataract, retinopathies often accompany children's cataract. I therefore advocate early surgical removal (6 months) of total cataract, both to prevent amblyopia and to enable a retinopathy to be diagnosed and treated. Time is very important in the management of these developmental conditions. Much damage can occur that can never be undone by deferring treatment or surgical intervention beyond the early months of development.

Strabismus and nystagmus usually do not begin to appear for six months. The desirability of their prevention is another potent argument in favor of early operation for cataract. Exposure to sunlight is not harmful; there seems to be a basis, however, for the opinion of some ophthalmologists that exposure to fluorescent lighting may be harmful.

Much treatment of retinopathies has necessarily been empiric. Tests have been available for allergies, syphillis, tuberculosis, etc., but until recently there has not been much information on the baby's metabolic or endocrine processes. A tremendous amount of progress is being made by both pediatricians and endocrinologists.

It is becoming well established that human milk has never been excelled as baby food. The pediatrician, endocrinologist and ophthalmologist encounter far fewer problems in treating the babies of nursing mothers. Even in the study of the retinopathies of prematurity, it has been noted that the well-nourished milk-fed baby fed on human milk often escapes the dreaded retrolental fibroplasia. Of course, retrolental fibroplasia does not develop in all artificially fed premature babies. I am convinced, nevertheless, that human milk feeding lessens the child's danger of retinopathies as well as many other developmental deficiencies.

Briefly, as regards treatment, I study

the nutritional status and empirically give the same type of treatment to babies with retinopathies as I have observed to be beneficial to adults. Foreign protein therapy seems to have definite value. The endocrine glands are studied. The total blood protein or protein-bound iodine (P.B.I.) test gives valuable information on thyroid function. Thyroid and parathyroid are used as indicated and are of definite value. Iodides and minerals are also proving valuable. The endocrine tests are opening up great new frontiers in the treatment of retarded children. The role of the thyroid in structural development of the eyes and body is well known, and the results of the treatment are sometimes pronounced. Cretins, mongolian idiots, etc., heretofore considered hopeless, are reported as showing astounding improvement. Perhaps in the near future the endocrinologist may be able to test and treat both mother and child to prevent these retinopathies and general deficiencies. A tremendous field of study is presented for the physician with imagination and vision.

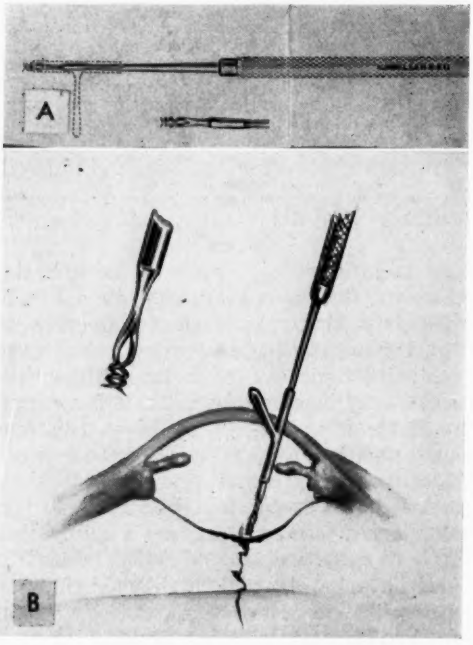

Fig. 4.—*A*, instrument maker's pictures of an experimental hook punch of the author's design. It has two opposite sharp prongs, so that once engaged in tissue it cannot be released. The author reports it with considerable reluctance and advises its use only when there are free filaments and fragments. *B*, experimental screw punch as the author used it. He passed it through a small keratome incision in the cornea. The sliding scabbard protects the iris from the points where it passes through the cornea. It was rotated to engage the tissue and punched out a hole in the membrane. It may also tear the membrane loose. It is a vicious instrument; it has been utilized in only 5 cases, and it is not yet recommended. The author has used it only in last resort salvage operations. He prefers making a cut through the membrane with a straight Wheeler knife as Reese does, or with his own curved knife.

Preliminary care and treatment before operation are also very important. The coagulation test for persistent bleeding is especially to be considered, particularly if there are iris adhesions. Autohemotherapy has proved to be of distinct value for these bleeders. Early operation on both eyes to restore visual function is justified, to prevent strabismus and, especially, nystagmus. Visual training exercises may prevent further loss of vision and often produce improved retinal function. Training should be started as soon as the child is old enough to cooperate. Light exercises can be used with blind babies even a few weeks old, and are desirable before operation.

Retinopathies of Prematurity (RL. F.) and Abnormalities of the Vitreous: A differential diagnosis between fibroplasia (five stages) and hyperplasia and the other vitreous opacities (cysts, tumors) is not easy, particularly in young infants with small pupils. The differential diagnosis is highly important, since the fibroplasia is not operable, while the hyperplasia may be. Neither fibroplasia nor hyperplasia should be confused with posterior types of cataract, but they frequently are. Little is definitely known as to the cause of the great increase in the number of retinopathies (RL.F.) among prematurely born babies. The evidence indicates, however, that oxygen, used and withdrawn rapidly, and nutritional deficiency are definite factors. A third phase, however, impresses me—that is, endocrine disturbances, particularly of the thyroid.

The Wolfe Cataract Foundation is now engaged in making the study of these retinopathies a research project, particularly from the endocrine standpoint. We have interested some other investigators, hoping that some information of value may be uncovered with regard to the nutritional and endocrine aspects of these retinopathies in both babies and mothers. We are experimenting with treatment, as part of the research project, in some of the early RL. F. cases (Stages 1, 2 and 3). As yet, however, there is no known treatment for this condition.

It is increasingly apparent that thyroid dysfunction, particularly hypothyroidism, exists with certain retinopathies. The role of the thyroid gland in retarded development and structural defects is well known, and it is proving to be just as important in eye conditions. With the tremendous increase of retrolental fibroplasia, it is time to begin a more thorough analysis of blood chemistry and thyroid function in pregnancy. Mothers who have had premature births or who are threatened with abortion should be studied. If a premature birth occurs, a study of blood chemistry and metabolism should be made on both mother and child. If the protein-bound iodine (P.B.I.) test for thyroid function reveals hypothyroidism, then early treatment should be considered in an effort to prevent or limit the retinopathies. Thyroxin fraction (Squibbs), iodides, fever and foreign protein therapy, minerals, vitamins, etc., in my experience have proved valuable. The role of malnutrition and oxygen seems proved, but nonetheless the glandular phase (particularly the thyroid), and the causes of uveitis should be considered early. If RL.F. is to be effectively treated, the earlier one starts the better the chances are of limiting its ravages. When the fourth or fifth stage is reached, treatment seems to be futile. Study of the blood chemistry at birth and consideration of preventive treatment offer the best chance. Both obstetrician and pediatrician should give patients with uveitis early consideration from the standpoint of prevention. The PBI test supplies a reliable index to the glandular treatment. Prevention of eye defects by early study and treatment by the obstetrician and pediatrician may be the keynote of one phase of the RL.F. problem.

REPORT OF CASES

CASE 1.—B. A. N., an attractive 6-year-old Kansas girl, had a heavy pupillary membrane almost completely obstructing the center of the pupil. The left eye was the same. With the pupils undilated the child's vision was 20/200 in each eye; this was slight-

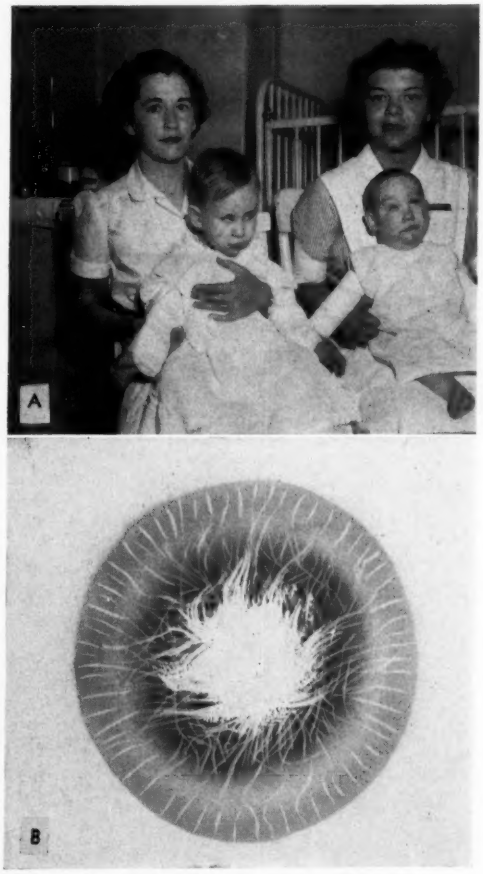

Fig. 5.—*A*, brothers R. O. and B. O. (Cases 2 and 3), totally blind before operation (see text). *B*, artist's composite picture of anterior pupillary and plastic membranes of all four eyes.

ly improved after dilation, but the vision was eccentric. A small keratome incision was made in the cornea at the limbus at 12 o'clock. The hook knife was inserted and passed through the anterior chamber in front of the membrane. The point of the curved knife severed the central strand at 6 o'clock. The blunt hook was then inserted and, by stretching and pulling the membrane, the other strands were broken.

There was very little operative hyperemia, and the vision was immediately restored to 20/30. The right eye after six months shows only remnants of the membrane at the pupillary margin, and the patient has normal 20/20 vision. The left eye after six months shows a sclerotic remnant extending in from the nasal side toward the center of the pupil. It is not sufficient to interfere with the 20/20 vision, and reoperation will not be performed unless it does. The patient has single binocular vision of 20/20.

CASES 2 and 3.—R. O. and B. O., brothers, were totally blind before operation (Fig. 5*A*). The anterior chambers were almost absent in all four eyes. There were very heavy white sclerotic membranes completely obscuring the pupils, extending beyond the inner circle of the iris into the angle in all four eyes. They were diagnosed as pupillary membranes with prenatal plastic exudate. The membrane was so heavy in one boy's eyes that the iris could not be seen until after the first operation. A composite picture (Fig. 5*B*) shows the artist's conception of the anterior pupillary and the plastic membranes of all four eyes before the operation. The membranes were opened with the hook knife technic and an iridectomy. Then a capsulotomy was performed with a Schweiger forceps, the synechiae being broken up and as much of the membrane and capsule removed as was possible. Thin, cataractous lenses were sucked out, after which posterior membranes of varying amounts were revealed in all four eyes. Fair openings were obtained with the hook knife technic. Both

Fig. 6.—*A*, D. F., boy aged 7 months, totally blind (Case 4). *B*, same child one year after operation by author's curved knife technic.

Fig. 7.—M. S. of Illinois (Case 6). This boy had a normal right eye, but the left eye had been blind since birth.

Fig. 8.—*A*, B. W. of Nebraska (Case 7), in whom posterior membranes were observed immediately after suction operation for cataract. *B*, H. M. Jr. of Tennessee (Case 8), who had a family history of ocular disease (see text).

boys have useful vision, one boy in one eye only. One eye has since been reoperated on for the posterior membrane, and a good opening was obtained. Both boys are mentally below par. The younger has shown much improvement physically under treatment and demonstrates good vision with his cataract lenses.

CASE 4.—D. F., a healthy South Dakota boy aged 7 months (Fig. 6*A*) had been discovered to be totally blind at the age of 4 months. There was no family history of ocular disease. I performed a suction operation for removal of a soft cataract when the child was 7 months old. Two weeks after thin lenses were removed by suction, posterior membranes were observed in both eyes.

Figure 6*B* shows the same child one year after the curved knife technic was used to open the undiagnosed posterior membrane. A good opening was obtained in the left eye and a fair opening in the right. Vision cannot yet be measured but is thought to be very good. The child wears his aphakic correction and reaches for small objects. Nine months later the parents reported his vision much improved.

CASE 5.—V. A., of Kansas, born totally blind, was brought to me at the age of 10 months. A posterior opacity was discovered a few days after a total cataract had been sucked out. I removed the posterior membrane by the knife and hook technic. The referring eye specialist reports good vision

Fig. 9.—M. M. of Illinois (Case 9), born totally blind.

with a plus 11.00 in a helmet (frame).*

CASE 6.—M. S. of Illinois, a boy 8 years old had a normal right eye and a left eye blind since birth. A posterior retrolental opacity was plainly seen at the first examination. The primary diagnosis was vitreous hyperplasia. A thin clear lens was first sucked out in the one-step procedure; then the sickle knife was used to cut a good opening through the posterior vitreous tissue. It has remained open and the patient has obtained a good visual result (Fig. 7*A*).

CASE 7.—The patient in this case was B. W. of Nebraska (Fig. 8*A*), whose father had complicated annular cataract. Posterior membranes were observed in both of the child's eyes immediately after cataracts were sucked out. He was very cooperative, and I was able to examine him well by the slit lamp. I diagnosed the opacities as opaque hyaloid sheaths. The sickle knife hook technic gave a good opening in these hyaloid membranes, and the child obtained 20/20 vision.

CASE 8.—The patient in this case was H. M. Jr. of Tennessee, a boy aged 7 (Fig. 8*B*). I have operated on his mother for complicated cataract and am treating her for a retinopathic condition. Both of the boy's eyes were operated on at the age of 7. Thin soft cataracts were sucked out. Posterior membranes were diagnosed soon afterward. I used the knife hook discission technic three times before a good central opening was obtained. The membranes were diagnosed as probably hyaloid or cyclitic by slit lamp examination. A positive differential diagnosis was difficult because of rapid horizontal nystagmus. The boy has a good central opening in the posterior membrane. He has obtained fairly good visual function in spite of considerable retinopathy. He attends a military school and maintains good grades. The rapid horizontal nystagmus has been reduced approximately 50 per cent.

CASE 9.—M. M., of Illinois, was born totally blind. The first eye was operated on when she was 15 months old, and the second eye

*Since this paper was presented at New York, the left cataract was also operated on by the suction technic. A thin posterior membrane similar to that in the first eye (probably hyaloid) was encountered. It was also operated on by the curved knife hook technic. The media was entirely cleared. The boy now has estimated normal vision with his aphakic correction. Nine months later, he is still gaining in retinal function.

Fig. 10.—*A*, N. D. of Illinois, born blind. *B*, photograph of N. D. taken two years after the operation.

Fig. 11.—*A*, L. R. of Iowa (Case 11), born blind. This girl was a pupil at the state school for the blind. *B*, C. W. of Colorado (Case 12), photographed before operation.

four months afterward. Thin, partly opaque lenses were sucked out. They were not sufficiently opaque to account for the total blindness. Unidentified posterior membranes were discovered two weeks after the lenses were eliminated. The knife hook technic was employed and a good central opening obtained. Although this child is mentally retarded, she has good useful vision, picks up small objects and wears a +11.00 lens for each eye in a helmet-type frame without objection.

CASE 10.—N. D., of Illinois, a girl aged 18 months (Fig. 10*A*), was born blind. The left eye had light perception only and was chronically inflamed. Another surgeon had needled the left eye when the child was 9 months old. I found the right lens two-thirds opaque, and a posterior membrane was seen after the lens had been sucked out in the one-step procedure. The left eye was later reoperated on for a posterior capsule and membrane, probably cyclitic, and fair vision resulted. The sickle knife and hook technic was used on the right eye, with a good visual result. Another photograph (Fig. 10*B*) was taken two years after the operation. In the right eye the child's vision is estimated as normal (but unmeasurable). However, she identified small objects. The salvage operation (Fig. 3) was performed on the left eye. She obtained fair vision and a quiet eye. Nine months later the parents reported her vision as much improved.

CASE 11.—L. R. of Iowa (Fig. 11*A*), aged 7, was born blind. She came to me from the state school for the blind. The mother had had measles during pregnancy. Another surgeon had needled both eyes when she was 9 and 12 months old. She had partial seclusion of the pupils and neither had better than 10/400 vision. She had a rapid horizontal nystagmus. Both eyes had partly absorbed lenses; posterior, opaque (hyaloid or cyclitic) membranes were diagnosed on first examination. The one-step operation was sufficient for both eyes. I used the knife and hook to cut the posterior membrane. The membranes opened well on the first operative step and she obtained good

visual function in spite of a definite retinopathy. The marked nystagmus is much improved.

CASE 12.—C. W., a Colorado girl aged 14, was photographed prior to operation (Fig. 11*B*). She attended the Colorado School for the Blind. Both eyes were needled when she was 7 years old by another surgeon. There was profound formation of scar tissue in each eye. The right eye had finger vision at 15 inches before the operation. The left eye was phthisic.

The slit lamp demonstrated that there were three distinct layers of membranes. The first, anterior, was probably thickened, macerated anterior capsule and iris. There was much exudate and scar tissue, with heavy iris synechiae, but still an adequate opening. The second membrane was probably posterior capsule. The third posterior membrane could have been either cyclitic or hyaloid, or both. The schematic drawing (Fig. 12*B*) is an attempt to illustrate the situation of the three membranes. (The unusual clinical observation was verified by Dr. F. L. Wahrer). The sickle knife technic was used to open both occluding membranes in two procedures at one sitting, i. e., the knife was passed through the pupil opening of the anterior iris membrane, and the second, or the anterior, of the two occluding membranes was first opened. Then, without removal of the sickle knife, the second occluding membrane, or the posterior one, was opened and a central portion broken with the blunt hook. The girl obtained 20/40 vision, attends regular school and is fully rehabilitated.

A later report says she obtained 20/30 vision. She has been referred to a local oculist for refraction. Her mother says that she is a "new girl." I shall fit a contact lens soon.

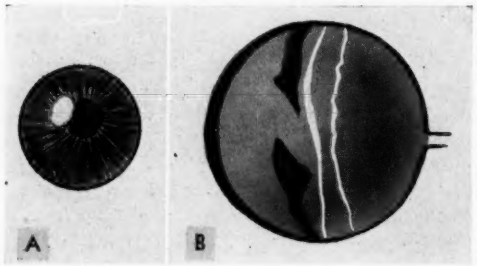

Fig. 12.—*A*, drawing of a 5 mm. sclerotic disc which was punched out and floated into the anterior chamber but has since been nearly absorbed. *B*, schematic drawing to show the situation of the three membranes in the case of C. W. (Case 12).

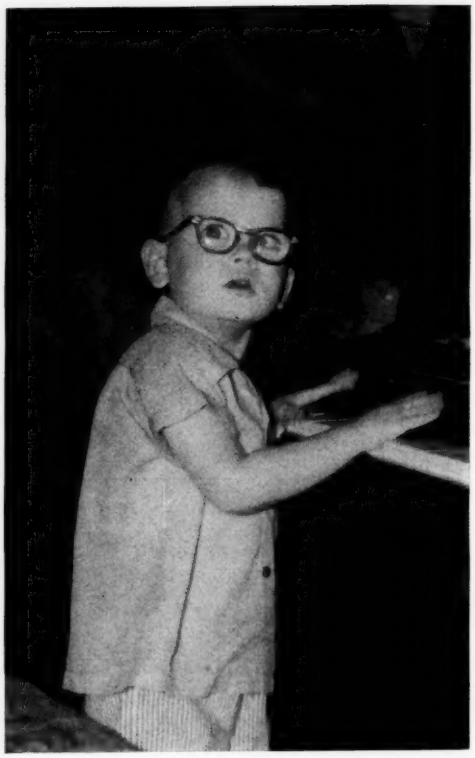

Fig. 13.—D. F. of Texas (Case 13). Total blindness was discovered when this boy was 8 months old.

CASE 13.—D. F. (Fig. 13), a 3-year-old Texas boy, was found to be totally blind when 8 months old. I performed the suction technic and cleared the anterior media of a partly opaque lens. The lens opacities were not heavy enough to account for the total blindness. Two subsequent sickle knife and hook technic operations failed to open posterior membranes in either eye. The third operative procedure was with the screw punch and a fair opening was obtained in the membranes. In the right eye, a sclerotic 5 mm. disc (Fig. 12*A*) was punched out and floated into the anterior chamber but now is almost all absorbed. A lesser, but fair opening was obtained in the left eye. D. F. has obtained good useful vision in both eyes. He is able to pick up small objects, rides a

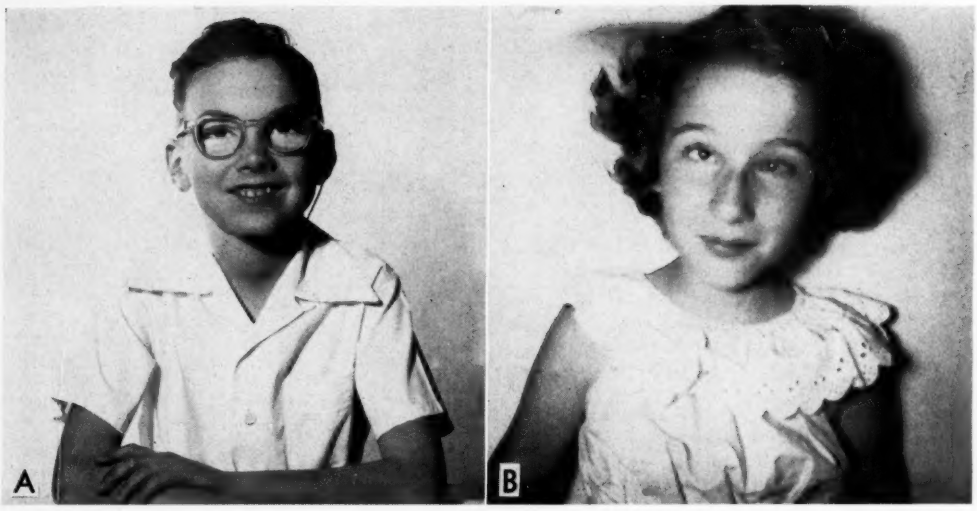

Fig. 14.—*A*, K. McC. of Missouri (Case 14), born totally blind and deaf. Photograph taken one year after operative treatment. *B*, N. L. of South Carolina (Case 15) who had microphthalmos with total cataract.

tricycle and indulges in most normal activities for a boy his age.

CASE 14.—K. McC. (Fig. 14*A*), a Missouri boy born totally blind and deaf, was 8 years old when brought to me. A double needling and a linear extraction had been performed by a competent ophthalmologist when the boy was 4. My examination revealed perception of hand movement at 2 feet. There was pronounced rapid nystagmus. The boy could be fully examined only under anesthesia. An extremely heavy membrane (2 layers) was diagnosed as cyclitic, hyaloid or both. I opened the membranes and cleared the media with the sickle knife and hook. In spite of an irregular pupil, the boy has clear media and good visual function. The photograph was taken one year after the operation. With greatly improved hearing (electric aid) and the good visual result, he has been completely rehabilitated. He goes to a special school, indulges in all activities and can read fair-sized print. He has a retinopathy, but this is improving under treatment, and he has useful vision—20/20 in the right eye and 20/70 in the left. The nystagmus has been reduced about 75 per cent (estimated). He rides a bicycle, plays the accordion and gets good grades in school.

CASE 15.—N. L., 8 years old (Fig. 14*B*), was a pupil at the South Carolina School for the Blind. There was micro-ophthalmus with total cataract. She had had two previous needlings in each eye, the first at the age of 1 year. In the right eye I first used the sickle-shaped knife to open the anterior membrane through a large iridectomy. I then sucked out some of the soft encapsulated lens. A posterior membrane was observed (in both eyes), which I opened with the knife. Solid sclerotic fragments were removed by forceps. In spite of a retinopathic condition (improving under treatment), the right eye has good visual function. The left eye was treated by a three-step procedure, the last for the posterior membrane before the media was cleared. Exudate tends to fill in again and may require further operation. The right eye has very useful vi-

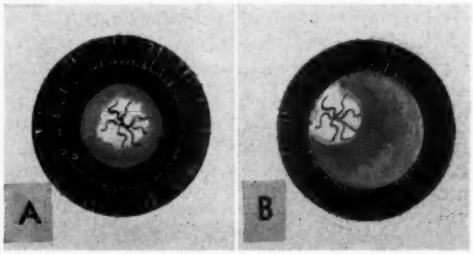

Fig. 15.—Drawings in case of W. H. (Case 17). *A*, posterior hyperplasia prior to operation; *B*, hyperplasia after suction removal of thin, clear lens.

sion and the left eye fair vision, but the two do not coordinate.

CASE 16.—R. McK., a three-year-old Michigan boy, had what looked like a typical hyperplasia as described by Reese. I opened it and removed a portion. The Army laboratory report stated that it probably was lens tissue. Clinically, I could see no resemblance to lens tissue.

CASE 17.—W. H., a 7-year-old South Dakota boy, was totally blind in the left eye, with a retrolental membrane diagnosed as vitreous hyperplasia. The right eye was not involved. Figure 15*A* shows the posterior hyperplasia before the operation. Figure 15*B* shows the hyperplasia after the thin clear lens had been sucked out. First, the lens was eliminated by being sucked out by my double cannula technic; then two attempts were made to open the membrane with the sickle knife and hook, but failed. The third time, the screw punch was used and the tissue all removed. The eye looked very promising for three days, after which a profuse intra-ocular hemorrhage occurred, was very slow in absorbing and resulted in vision of hand movement only. The eye was cleared, but the cornea is blood-stained and the case is considered a failure.

Comment. — I am strongly convinced that simple needling for juvenile cataract is an incomplete operation. If the eye is small or the pupil cannot be dilated, as in about half the cases, a needling alone is definitely contraindicated. If adhesions of the anterior capsule and iris are present, this is a major complication and calls for an iridectomy. The younger the child, the more frequently exudative scar tissue develops after needling, and subsequent poor results are obtained. This accounts for the fact that many surgeons have refrained from operating on babies. This objection, however, can be mostly obviated if the lens is expressed (by linear extraction) or sucked out, preferably the latter.

There are many arguments for suction removal of the lens. Space does not permit me to go into detail, but I consider a needling alone for juvenile cataract an obsolete procedure.

Opening occluding membranes to clear the visual media is "salvage surgery," but improved vision is obtained in 50 per cent of the children. These procedures are justified, provided the surgeon and the parents have a clear understanding beforehand.

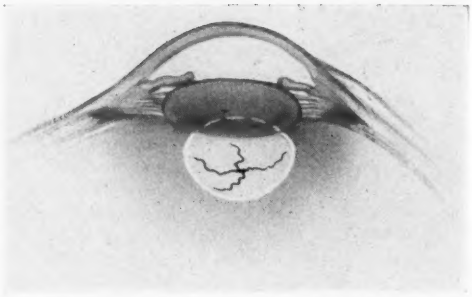

Fig. 16.—Schematic illustration of a typical hyperplasia of the primary vitreous (Reese) and also as the author conceived it from his surgical experience. Vitreous hyperplasia ordinarily involves only one eye, but it man involve both. The lenses are usually thin and partly opaque but may be entirely clear. The vitreous hyperplastic membranes have distinct margins. There is usually a nest of blood vessels. If there is a history of short-term pregnancy, it is difficult to differentiate from fibroplasias, especially if both eyes are involved and the lenses are not clear. Unless the differential diagnosis from retrolental fibroplasia could be made, the author has not resorted to surgical intervention.

SUMMARY

Blindness in children resulting from developmental or exudative tissue in front of the lens or behind it (perilenticular) is discussed from the surgical viewpoint. Seventeen cases are illustrated both before and after surgical treatment. The cases of children with membranes or tissue, posterior to the lens, both anterior to the vitreous and within it are illustrated from the surgical point of view.

Differential diagnoses are not always made prior to surgical intervention, particularly if the lens is partly cataractous. In the developmental type of membrane in the cases here reported there was a common denominator; i. e., the lenses were smaller than the average.

Lens removal by the author's lavage suction instrument was performed prior to any operation on the posterior lenticular tissue, affording quick elimination of the cataractous lens (part or whole). As compared to the slow elimination of the lenses

from needling alone, suction removal quickly affords a clearing of the media in front of the tissue and facilitates a quicker differential diagnosis.

Posterior capsular membranes in aphakia were usually not as great a problem unless tension was encountered. Hyaloid or vitreous tissue, however, was encountered in several cases. The differential diagnosis of capsular from cyclitic or exudative or hyaloid membrane was not always possible. An effort was made, nevertheless, to clear the media surgically, and improved vision was obtained in approximately half of the cases. Several unsuspected posterior membranes were discovered after removal of cataractous lenses.

In cases of the true zonular type of cataract no posterior lenticular membranes have been encountered. In cases of zonular and other types of uncomplicated juvenile cataract, the results with the author's suction technic are in the 90 per cent bracket.

Hyperplasia of the vitreous is not infrequent, and it is rather easily confused with fibroplasia. It should not be confused with cataract, but this has occurred. Differential diagnosis is more difficult in the early stages if the pupils are small. Diagnosis is very important, as there is no known surgical treatment for the fibroplasia.

RÉSUMÉ

L'auteur continue dans cet article une série d'études sur la chirurgie des membranes périlenticulaires chez l'enfant. Plusieurs cas à l'appui. L'auteur décrit son procédé chirurgical du traitement de la cataracte de l'enfant et insiste sur l'importance de la vision maintenue. On doit nécessairement viser à un résultat cosmétique, sans toutefois sacrifier la fonction visuelle.

L'auteur discute aussi de certaines pathologies de la rétine et d'anomalies du corps vitré. Il insiste sur le diagnostic et le traitement précoces de ces affections.

ZUSAMMENFASSUNG

Die vorliegende Arbeit über die chirurgische Behandlung von perilentikulären Membranen bie Kindern ist ein Stück aus einer Reihe von Artikeln des Verfassers über die ophthalmologische Behandlung kleiner Kinder. Es wird über zahlreiche Fälle mit erläuternden Einzelheiten berichtet. Der Verfasser beschreibt seine Technik der Operation des jugendlichen Stares und betont die überragende Wichtigkeit der Erhaltung der Sehkraft; wenn auch gute kosmetische Resultate höchst wünschenswert sind, so müssen doch die funktionellen Ergebnisse, wenn beides nicht erzielt werden kann, den Vorrang einnehmen. Der Verfasser hält die einfache Nadelung für eine unzulängliche Operation zur Behandlung des jugendlichen Stares.

Die Behandlung von Netzhauterkrankungen und von Anomalien des Glaskörpers wird ebenfalls erörtert; dabei wird die Bedeutung einer frühzeitigen Erkennung dieser Erkrankungen hervorgehoben und die Wichtigkeit der Vorbehandlung von Kindern, die zur Operation bestimmt sind, betont.

RESUMEN

Se presenta la terapeútica quirúrgica de las membranas perilenticulares en el niño, continuación de una de la series de artículos del autor sobre el tratamiento oftalmológico en la infancia. Se comunican é ilustran en detalle numerosos casos. Se describe la técnica quirúrgica del autor para la catarata juvenil, haciéndose notar la marcada importancia de la preservación de la función visual; aun cuando es muy deseable un buen resultado cosmético, debe de darse preferencia al resultado funcional si no pueden ser obtenidos ambos resultados. El autor considera al "agujamiento simple" como una operación inadecuada para la catarata juvenil.

Se discute también el tratamiento de los padecimientos de la retina y las anormalidades del cuerpo vítreo, con énfasis sobre la importancia del reconocimiento tempra-

no de estos padecimientos y sobre el tratamiento de niños en los que ha de realizarse la operación.

RIASSUNTO

Gli Autori presentano, in continuazione alla loro serie di articoli sul trattamento oftalmogico nei giovanissimi, la terapia chirurgica delle membrane perilenticolari nei bambini. Vengono riportati e dettagliatamente illustrati numerosi casi. E' descritta la tecnica operatoria usata dagli Autori per la cataratta giovanile e sottolineata l'importanza della continuazione della funzione visiva; benchè il risultato estetico sia molto importante, purtuttavia qualora non possano ottenersi entrambi, viene data la preferenza al risultato funzionale. Gli Autori considerano che nella cataratta giovanile la semplice perforazione sia un trattamento inadeguato.

Vengono anche discusse le anormalità del cristallino e il trattamento delle condizioni retinopatiche; sottolineata inoltre l'importanza di una diagnosi precoce e le cure preliminari nei bambini che dovranno poi essere sottoposti ad intervento.

HIPPOCRATES ON OPHTHALMOLOGY

It is a sign of the crisis when the eyes and their whites, having been dark or livid, become clear. To become clear quickly denotes a quick crisis; slowly, a tardy one.

For the eyes to become misty, or for the whites to become red or livid or to show marked venous congestion, is not a pretty sign; it is also a poor sign when there is photophobia, or lachrymation, or strabismus, or if one pupil becomes smaller than the other. It is also bad if the eyes move restlessly, or if there are small styes, or if they show a thin skin over them, or if the pupil becomes smaller and the white of the eye bigger, or if the pupil is hidden by the upper eyelid. Bad signs too are enophthalmos, a severe degree of exophthalmos, lack of their lustre so that the pupil fails to dilate, irregularity of the eyelids, fixity of the eyes, continuous blinking and changes of colour. For the eyes not to close in sleep is a fatal sign. Squint is also bad.

Redness of the eyes occurring during the course of a fever denotes protracted stomach trouble.

Swellings by the eyes in convalescence indicate violent diarrhoea.

A rigor supervening on strabismus of the eyes, with lassitude and fever, is a fatal sign. To be comatose when these signs are present is bad also.

Fever supervening on ophthalmia ends the latter; if it does not, there is risk of losing one's sight, or one's life, or both.

When headache develops in cases of ophthalmia and accompanies it for a long time, there is a risk of blindness.

The Retinopathy of Hypertension and Pregnancy*

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ELUCIDATION of the causes of the hypertensive state has been and still is the purpose of innumerable clinical and laboratory investigations. The prevalence of the condition, its increasing frequency, the hereditary factors and the legion of suggested cures and alleviations evidence the importance of the subject. The timeliness of this demonstration of the actual ocular fundus changes found in proved high blood pressure is manifest.

Most authors either accept some of the published classifications of duration and intensity or propose another. No new scheme is here suggested to confuse the issue for we feel confident that a careful study of each photograph** will lead the ophthalmologist to correctly evaluate the signs and correlate them so as to render worthwhile conclusions to the physician and the patient.

There is no absolute in the comparison of the ratio of the retinal artery to the vein neither is there one for the degree of vein compression or elevation where it is crossed by an artery. The physiologic variations are many and must be recognized as such. It is so simple to take the blood pressure that the ophthalmologist should record it whenever a suspicion of hypertension is found.

In considering the changes in the fundus of the hypertensive patient it is necessary to understand the normals.

In congestion of the disc there is a definite pinkness confined to it while in congestion of the fundus the entire background is red, the veins decidedly engorged, the arteries full, and the disc pink.

Often it is difficult to decide whether a dark red streak close to a vessel is a hemorrhage or an overlapping of a paralleling artery and vein.

One of the dominant signs of early hypertension is the compression of a vein, but it must be remembered that there are physiologic indentations. The earliest pathologic alteration is the pushing aside of the vein by the adjacent artery; this becomes an indentation if the pressure is continued. If the compression is great or extensive it may cause peripheral dilatation of the vein, and if the vein and artery are in a common sheath it cannot be seen beneath the crossing.

For many years it has been known that when there is an increased reflection along the course of an artery it may be sufficiently intense to resemble the light reflected from a newly strung copper wire; for that reason it is called a copper wire artery.

If a patient is observed from the beginning of the copper reflex throughout life, it will be noted that the reflex changes to a silver one indicating advancement of the disease. When hypertension has existed for a long time both the copper and the silver wire may be found in the same vessel. White irregular, broad streaks on an artery wall are atheroma plaques.

Tragic, cerebral vascular accidents which come in the course of hypertension can be most readily appreciated by the

*Substance of remarks made in the presentation of 50 Kodachromes. Some of these are reproduced in *Ciba Clinical Symposia*, Vol. 4, No. 5, July 1952, and Vol. 4, No. 7, October, 1952.

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**Those interested in the photographs referred to are requested to communicate directly with Dr. Arthur J. Bedell, 344 State Street, Albany, New York.

critical inspection of the fundus and the knowledge that the intracranial alterations are similar. The first of these is an embolus, a white plug which may be visible in the course of an artery and cause an edema, ischemia, of the retina in the region supplied by the closed vessel. In total embolism the oval ischemia extends from the nasal side of the disc to beyond the macula as a pale, slightly elevated, sharply delimited region with an interruption of the blood stream in the veins. Sometimes a portion of a vein remains full, simulating a hemorrhage. At the onset the macular region is pink but twenty-four hours later the ischemic oval is much larger and thicker while the so-called cherry red spot is smaller and the blood current is discontinuous in both the veins and the arteries.

The recognition of the stage of embolism is medico-legally extremely important in establishing the time it started. In either partial or total embolism the patient complains of sudden loss of vision.

Rapid occlusion of a retinal vein also causes a prompt reduction in sight.

In a series of four pictures of the same patient with partial vein thrombosis the first shows the earliest seeping of blood; four weeks later the greater extravasation with an oblique, large white center; two months subsequently the white center is lessened although the hemorrhage is greater, and finally there is complete resolution.

Total central vein closure presents an unmistakable and pathognomonic picture varying in intensity but always similar in the widespread hemorrhages, dilated veins, narrow arteries, and irregularly distributed white patches. A partial or total sudden occlusion of either a retinal artery or vein is rarely if ever influenced by any treatment.

The next vessel change is spasm and this as you will note when we discuss pregnancy is of extreme importance for upon its recognition depends the life of the mother and the baby. When the spasm is complete the entire fundus is pallid but after a time the vessels return to normal size although the vision is permanently lost.

Next in order of frequency are the retinal edemas. These are readily separated into three gross classes, small isolated cloudy swellings, often but not invariably along the vessel, the cotton wool spot. The second includes the disc and contiguous retina so that it looks as though the fundus were not accurately focused, and the third is the papilledema of hypertension, where in one type the veins are much engorged, the arteries are very narrow and the entire disc pale, while in the other form the arteries are smaller than normal, the veins fuller and the disc projects forward with the rounded margin of a classic choked disc.

The majority of hypertensives do not have a retinopathy. This must be stressed and the patient made to appreciate the significance of the statement. When, however, a retinopathy starts, it is seldom controlled although the rate of progression may be retarded.

In a fifty-year-old woman of a hypertensive family after systolic pressure had been above 256 for more than five years the veins were slightly distended with marked tortuosity of the arteries. Not willing to curtail her activities at the end of three years there was a great increase of artery tortuosity especially around the superior portion of the macula, and large flame-shaped hemorrhages; in the other eye the arteries were more tortuous with copper wire reflex, but neither hemorrhages nor exudates appeared until three years later when there was considerable edema of the retina, several hemorrhages, and contraction of arteries. She lived one year.

There is a type of hypertension in which

the arteries are straight and narrow, as found in a forty-six-year-old male who died subsequently of cardiovascular disease after having had for years an intense occipital headache in the early morning hours—the most distinctive symptom of hypertension.

A patient may have hypertension for a decade or more with comparatively little physical distress, and then suddenly develop an extreme fullness of the veins, atheroma of the arteries, many hemorrhages, and a pale disc with new formed vessels on its surface. Such terminal signs were observed 30 days before the death of a fifty-year-old male.

The fundus of a fifty-seven-year-old male with systolic pressure around 230 over a high diastolic will illustrate the need of careful inspection to recognize the narrow arteries as the inaugural sign of progressing hypertension. He was urged to retire, but did not and the result was that three years later, 30 days before death the arteries were attenuated, the veins dilated with several superficial flame shaped retinal hemorrhages.

The earliest ocular signs of fulminating hypertension require further elaboration. A few cases will illustrate. A twenty-four year old male had small straight arteries similar to those physiologic in old age. Six months later he had extensive retinal edema, obscuration and swelling of the disc, many hemorrhages, several exudates, and very narrow arteries; death came 30 days later.

Perhaps, one of the most representative types was a patient who died five days after the examination of her fundus. She reported because of poor vision and had no idea that she was ill. The disc was bluish with lost outline, attenuated retinal arteries, full veins and large hemorrhages.

The fundus of another woman showed a slight constriction of the arteries, with irregular caliber particularly above the disc. Five months later she had a fully developed fulminating hypertension with kidney signs dominant, macular star, several cotton wool exudates, loss of disc outline, hemorrhages, and narrower vessels.

Fulminating retinopathy follows a pattern which if once recognized and analyzed make it possible to foretell the outcome, but never to the point of setting the time of death. A patient may have numerous cotton wool spots, a macular star, several hemorrhages, and thin vessels and yet live for years. Fulminating hypertension is usually entirely different from the benign. The combination of hypertension and kidney disease is so well recognized that mere mention of the combination is sufficient.

Few special phases of rentinopathy attract more notice than those which enable the ophthalmologist to tell the surgeon that the patient should have an operation to relieve the hyperiesia.

When a patient has an intolerable occipital headache, with narrow arteries, and retinal hemorrhages, and a persistent hypertension, operation is often suggested. On other occasions we have discussed the cardiovascular-renal signs suggesting the advisability of a sympathectomy. No ophthalmologist should recommend a blood pressure reducing operation without consulting an internist. The problem is too comprehensive, and the ophthalmoscopic findings only one factor of many that the surgeon needs before he decides to operate.

The tension is not always reduced by an operation although the headache is relieved and the hemorrhages and exudates disappear, the vessels remain unchanged.

When a young patient has hypertension which is not controlled some physicians advise operation. A forty year old male had edema of the disc with loss of outline, contracted bright walled arteries, and a few exudates. After sympathectomy his

pressure fell from 220/126 to 180/80. The fundus cleared and for four years he has been at work.

In hasty review of the fundus changes in pregnancy it is to be noted that the most important sign indicating a serious state is an elusive spasm in one or more of the retinal arteries, accompanied by transitory blindness—partial or complete. Whenever a pregnant woman complains of a loss of vision, her fundus must be examined, and carefully studied. When she has repeated attacks of blurred vision and when these last an increasing length of time, it is imperative, if no other disease such as diabetes, brain tumor or one of the blood dyscrasias is present, that the pregnancy be terminated to prevent permanent ocular damage and persistent hypertension.

Three photographs* of a pregnant woman who complained of inability to see to which no attention was paid and nothing done while she was allowed to go to full term, will dramatically illustrate the value of ophthalmoscopy. Her pressure was 240/100. There were white isolated spots in the edematous retina, constricted arteries and a comparatively clear macular region. Later a typical stellate figure formed about the macula. The star followed the usual course breaking up into small absorbing areas, but along the artery and vein there was a cloudy, white cotton wool spot. She is still living 10 years later, but with reduced vision; an invalid with limitation of all activities.

It is not possible to differentiate the fundus changes in pregnancy, when they are accompanied by kidney dysfunction from those which appear in the male with the same degree of kidney damage. In both there are full veins, irregular caliber arteries, many areas of transudate, and hemorrhages.

When a retinopathy is once developed in a patient where the underlying conditions cannot be controlled, death supervenes. Often the edema is comparatively slight, but the study of the blood vessels will disclose the spastic changes. Occasionally a woman is profoundly toxic and the obstetrician unfortunately hesitates to terminate the pregnancy.

When a woman was four and a half months pregnant and was examined because of difficulty in reading, the fundus changes were so startling and the retinal edema so great that immediate cessation of pregnancy was advised. Within four weeks the papilledema began to subside and the exudates were absent. Still later the disc returned to its normal size with restoration of vision.

Another patient had an advanced retinopathy, but nothing was done by her obstetrician. When she eventually came under observation the degeneration of the retina was evident in the extensive pigmentation about the macula. An optic atrophy may follow a neglected retinopathy occurring in a pregnant woman.

SUMMARY

In summary, attention has been drawn to the various hypertensive fundus changes. The benign type may last for years and years without any deterioration of vision or fundus changes. The fulminating form quickly destroys sight and death soon follows.

Special stress is placed upon the blood vessels, for they give the best indication of the progress.

Transudates, commonly called exudates, and hemorrhages have not been especially emphasized, although illustrations have been exhibited.*

The fundus alterations suggesting the advisability of a sympathectomy have been cursorily stated.

The first and most important sign of

*See footnote on page 763.

ocular damage in pregnancy is spasm of one or more arteries. When spasms increase in number and the attacks of blindness become more frequent the pregnancy must be terminated.

It is the duty of every ophthalmologist to be cognizant of these changes so that specific, definitive advice can be given to those who seek an expert opinion.

ZUSAMMENFASSUNG

Es wird auf die verschiedenen Augenhintergrundsveränderungen beim Bluthochdruck hingewiesen. Die gutartige Form der Erkrankung kann sich über Jahre hinausziehen, ohne die Sehkraft herabzusetzen oder Augenhintergrundsveränderungen hervorzurufen. Die plötzlich entstehende Form der Erkrankung führt rasch zur Zerstörung der Sehkraft und zum Tode.

Besonderes Gewicht wird auf den Zustand der Blutgefässe gelegt, weil sich aus ihm das beste Bild des Fortschreitens der Erkrankung ergibt.

Transsudate oder, wie man gewöhnlich sagt, Exsudate und Blutungen werden besonders hervorgehoben und an Abbildungen erläutert.*

Die Fundusveränderungen, die die Ausführung einer Sympatektomie angeraten erscheinen lassen, werden kurz dargestellt.

Das erste und wichtigste Zeichen einer Augenschädigung während der Schwangerschaft ist das Auftreten von Krämpfen in einer oder mehreren Schlagadern. Wenn die Krämpfe an Zahl zunehmen und Anfälle von Blindheit häufiger werden, muss die Schwangerschaft unterbrochen werden.

Um den zur Konsultation kommenden Kranken klaren und eindeutigen Rat erteilen zu können, muss der Augenarzt mit den erörterten Veränderungen vertraut sein.

*See footnote on page 763.

RIASSUNTO

Viene richiamata l'attenzione sulle varie modificazioni del fundus nell'ipertensione. Il tipo benigno può durare per anni e anni senza compromissione della vista. La forma fulminante, invece, la distrugge rapidamente e si ha in breve la morte.

I più utili ragguagli sul decorso del male sono forniti dallό esame dei vasi.

I trasudati, comunemente chiamati essudati e le emorragie vengono sottolineate in modo particolare.*

Vengono, inoltre, rapidamente delineate le alterazioni del fundus che suggeriscono l'indicazione della simpatectomia.

Il primo e più importante segno di danno oculare in corso di gravidanza è lo spasmo di una o più arterie. Quando tale spasmo interessa un numero di arterie sempre maggiore e gli episodi di cecità passeggera diventano sempre più frequenti, la gravidanza deve essere interrotta.

Ogni oculista deve conoscere tali alterazioni in modo da poter dare pareri ben precisi ogni qualvolta occorra la sua opinione di specialista.

*See footnote on page 763.

RESUMEN

Se considera atención a los diversos cambios fúndicos hipertensivos. El tipo benigno puede durar varios años sin trastorno visual o cambios fúndicos. La forma fulminante destruye rápidamente la visión y es seguida por la muerte.

Se señala particularmente a los vasos sanguíneos como los mejores indicadores para el progreso de la enfermedad.*

Los trasudados, llamados, comunmente exudados y las hemorragias son enfatizados, aun cuando se exhiben.

Las alteraciones fúndicas sugieren la recomendación de simpatectomía.

El primer signo de lesión ocular y el más importante en el embarazo es el esa-

pasmo de una o más arterias. Cuando los espasmos aumentan an número y los ataques de ceguera se hacen más frecuentes debe terminarse el embarazo.

Es el deber de todo oftálmologo reconocer estos cambios de manera de proporcionar consejo específico y definitivo a aquellos que buscan de su opinión experta.

*See footnote on page 763.

RÉSUMÉ

L'attention est attirée sur les différentes altérations hypertensives du fond de l'oeil. Le type bénin peut rester des années et des années sans la moindre détérioration de la vision ou modifications du fond de l'oeil. La forme fulminante détruit rapidement la vision et la mort s'ensuit bientôt.

Une importance spéciale est accordée aux vaisseaux, car ils donnent la meilleure indication du progrès de la maladie.

Malgré la présence d'illustrations,* les transsudats, ordinairement appelés exsudats, et les hémorragies sont spécialement mis en relief.

Les altérations du fond de l'oeil qui suggèrent l'opportunité d'une sympathectomie sont rapidement passées en revue.

Le premier signe, et le plus important, des dégâts oculaires dans la grossesse, c'est le spasme d'une ou plusieurs artères. Quand les spasmesse multiplient et que les attaques de cécité deviennent plus fréquentes, la grossesse doit être interrompue.

C'est le devoir de chaque ophthalmologiste d'avoir connaissance de ces changements pour donner des conseils adaptés et poritifs à ceux qui demandent une opinion experte.

*See footnote on page 763.

SUMARIO

Cham-se a atenção para várias alterações hipertensivas do fundo de olho. O tipo benigno pode durar muitos anoa sem qualquer perturbação da visão ou alterações do fundo de olho. A forma fulminante acarreta ràpidamente a perda da vista, logo seguindo-se a morte.

Salienta-se particularmente os vasos sanguíneos, pois fornecem a melhor indicação da evolução da moléstia.

É chamada a atenção para os transudatos, comumente chamados exsudatos, bem como para as hemorragias, sendo exibidas ilustrações.*

As alterações do fundo de olho, sugerindo a simpatectomia são apresentadas.

O primeiro e mais importante sinal da lesão ocular na gravidez é o espasmo de uma pu mais artérias. Qèuando os espasmos aumentam em número e os ataques de cegueira se tornam mais freqüentes, deve se pôr fim à gravidêz.

Todos os oftalmologistas devem conhecer estas alterações, de maneira a poder ser dado conselho específico e definitivo a todos que procuram opinião abalizada.

*See footnote on page 763.

HOME TRUTHS

I have found you an argument; I am not bound to find you an understanding.
—*Johnson*

Aesop's fly, perched upon the axle of the chariot-wheel, has been much laughed at for exclaiming, "What a dust I do make!"
—*Carlyle*

Pentothal Sodium in Seven Hundred and Forty-Eight Cataract Extractions

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IT is far better for the ophthalmic surgeon, in doing cataract extractions, to concern himself with the delicacy and technic of the operation rather than the behavior or misbehavior of an unruly patient.

No one can deny the tremendous psychic trauma associated with a cataract extraction or, for that matter, any ophthalmic operative procedure. While at the Wills Eye Hospital as a resident in 1938, I was appalled by the number of ophthalmic procedures performed with local anesthesia that did not afford the patient complete analgesia. Many come under that category, such as enucleations, muscle operations, retinal detachments, operations on the lacrimal sac, antiglaucoma operations and even cataract extractions. Quite naturally, I became enthusiastic about the use of general anesthesia in ophthalmic surgery.

Since April, 1946, unless contraindications existed, all cataract extractions were done under general anesthesia. Only a small percentage of patients (1 per cent) were refused general anesthesia by either the medical department or the anesthetist. The cases of the first 77 of these were reported in a paper read by me before the Ophthalmology Section of the Medical Society of the State of Pennsylvania at Pittsburgh in September 1947. The paper was later published in the *Pennsylvania State Medical Journal.*

Few patients prefer to be awake during the extraction of a cataract. Most surgeons agree, I am sure, that there is nothing more distressing during a cataract extraction than to have a nervous, apprehensive and uncooperative patient. The cooperation of the patient is obviously assured when general anesthesia is used. Frequently the patient who is to undergo a cataract extraction dreads more the thought of being awake than the operation itself, despite the fact that he knows the procedure will not be painful. Most of us have had the misfortune of seeing a panic-stricken, hysterical patient sit bolt upright upon completion of a cataract extraction under local anesthesia, causing the tragic loss of vitreous and hence a catastrophic result.

The relatively small percentage of cases in which this unfortunate release of nervous tension occurs nevertheless warrants, in my opinion, the use of general anesthesia in *all* cases in which no contraindication exists. The patient must, of course, have a complete physical inventory and medical release prior to the operation, as well as the benefit of a skilled anesthesiologist.

Review of Literature.—Lorhan, Guernsey and Ranniel[1] of the Department of Anesthesia, University of Kansas Hospital, mentioned that evolution of the ultrashort-acting barbiturates has opened the field of intravenous anesthesia and provided the anesthetist with a method that is dependable and effective when these agents are administered by experi-

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enced anesthetists. The use of pentothal in ocular surgery offers the anesthetist, the ophthalmologist and the patient an ideal anesthesia and alleviates the psychic factor in the patient. These authors also reported that morphine and atropine were used preoperatively with nearly all of their patients.

Pentothal sodium alone was first used clinically by Lundy[2] at the Mayo Clinic in 1934. Lillie,[3] in a personal communication to me shortly before his death, reported from the Department of Ophthalmology, Temple University Medical School, that they had been using pentothal sodium quite a bit, although they were not doing all of their cataract extractions under intravenous anesthesia. He reported 1 fatality from the use of pentothal sodium. The autopsy revealed nothing wrong, and pathologists expressed the opinion that it was a "thymic death," which, Lillie commented, is never a quite satisfactory explanation. Frank Lahey[4] of the Lahey Clinic, Boston, in giving his personal experiences as a patient, called pentothal sodium a "delightful anesthetic." Mallison[5] recommended intravenous pentothal sodium anesthesia as one of the most valuable advances in the science of anesthesia that has been made in recent times. Adler[6] in 1947 reported that he had been using pentothal sodium anesthesia for all of his intraocular surgical procedures since 1937. In a personal communication he stated: "My experience with the drug leaves me with the following conclusions:

"1. It is not without danger. We have had one death. This occurred in 1938 at a time when we were not ready to evaluate the dangers of the drug and since that time we have had no trouble but are careful to exclude bad risks.

"2. The complete relaxation of the eye makes section with Graefe knife more difficult. This does not bother us. We use a keratome and enlarge with scissors.

"3. The anesthetic should be given only by someone skilled in its use."

Hutton and Tovell,[7] covering a period of three years, had used pentothal sodium in 102 cases. Lundy[2] and his co-workers at the Mayo Clinic reported its use in 466 cases over a period of six years. Garofalo[8] has used pentothal sodium in 22 cases. Statti[9] reported 100 consecutive cases, over a period of twenty-four months, in which pentothal sodium anesthesia was employed, with favorable results. Thirty-four of these procedures were cataract extractions. At the same institution (St. Francis Hospital, Pittsburgh), under the supervision of Dr. George J. Thomas of the department of anesthesia, intravenous anesthesia has been administered more than 6,000 times in all types of surgical procedures.

Earlier, Lorhan[10] had reported that sodium pentothal was satisfactory in 227 cases. Ruth and Tovell[11] have used pentothal sodium in 58 cases. Hamilton[12] has used pentothal sodium in 21 ophthalmic procedures, mostly enucleations. At the time of writing the George F. Geisinger Memorial Hospital has used pentothal sodium intravenous anesthesia in 11,281 cases, not including those of outpatients, in whose cases it has been used in fracture reductions and many other procedures, after which the patient is discharged.

Thomas[13] reported a temporary fall in blood pressure, which is dependent upon the rapidity and amount of drug given. Betlach[14] concluded that pentothal sodium may be used with safety in patients who have cardiac disease but do not have cardiac decompensation. Since that time (1938) and until March 1942, reports have appeared in the literature of its use in 54,831 cases, which have been summarized by Long and Ochsner.[15] Jarmon and Abel[16] reported 1,000 cases without a single case of vomiting when no preliminary medication was used. Cameron[17] reported

225 cases in which the only instance of vomiting followed the use of an opiate. Not everyone has reported this remarkable freedom from postoperative nausea and vomiting, but all have agreed that its incidence is much less than with any inhalation type of anesthesia.

There is considerable discussion about using pentothal for children, but all authorities are agreed that it is contraindicated for the very young. The main reason for this, as summarized by Lamb,[18] is that children, having higher metabolic rates than do adults, require relatively larger doses. This could easily result in an overdose, especially since the reaction to barbiturates in the very young is uncertain. Also, the narrow airway in a small child presents a further difficulty in the adequate administration of oxygen, should an overdose of pentothal be given.

Post and Robertson[19] reported statistical data on 106 ophthalmic operations performed at the Barnes Hospital with the patient under pentothal sodium anesthesia. They concluded that none of the patients with whom they had contact thought the induction in any way unpleasant. In fact, most of them were agreeably surprised at the rapidity and ease with which they went to sleep and the remarkable freedom from the unpleasant after-effects that so commonly follow inhalation anesthesia. Also, in their opinion, pentothal sodium in almost every instance was eminently satisfactory from the standpoint of both the patient and the surgeon.

Various intravenous anesthetic agents had been used prior to the introduction of sodium pentothal. The first recorded use of intravenous anesthesia appears to be that of Pirogoff and von Flour, who in 1847 administered ether intravenously but abandoned the method because of the high mortality rate. The barbituric acid compounds were first introduced as intravenous anesthetic agents in 1929, when an attempt was made to utilize sodium amytal. This drug was abandoned because of the lack of proper relaxation and postoperative restlessness. Although pentothal sodium had been developed earlier by Tabern and Volwiler,[20] it was first used by Lundy at the Mayo Clinic in 1934.

Although the mechanism of the destruction of pentothal in the body is not clearly understood, it has been shown that the process occurs so rapidly that scarcely a trace can be detected (in the secretion) three to twelve hours after the administration of the single therapeutic dose, and for all practical purposes the effect lasts from three to thirty minutes, depending upon the dose used.[15]

According to Mallison,[5] the effects of pentothal sodium upon the circulatory system are minimal; no significant changes have been observed clinically in the pulse volume, rate, blood pressure or electrocardiographic tracings.[14] The disposition of pentothal in the body has never been clearly demonstrated; it is assumed that it is detoxified in the liver. The clinical and experimental data presented in the basis for this assumption, however, have not been entirely convincing. Lahey[4] suggested that anoxemia is the basis of most of the anesthetic difficulties. Adequate oxygenation minimizes danger. Consequently, it is almost universally accepted that antranasal oxygen is indicated throughout the administration of pentothal.

Contraindications.— Pentothal sodium is not suitable for long surgical procedures that require adequate muscular relaxation. Nephritic and hepatic diseases are contraindications to the use of the drug, despite the fact that little is known regarding the site and method of its destruction in the body. It is not practical or safe for children. Concerning the scope of the usefulness of pentothal sodium, Carraway[21] and many others have doubted that

there are contraindications, and suggest contraindications as actual indications for the use of intravenous pentothal.

Clinical Considerations.—The introduction of two important improvements in the technic of administering intravenous anesthetic drugs made it possible for pentothal sodium to become an effective agent for general anesthesia. The first of these innovations was the development of the intermittent method of administration, in which the anesthetic solution was injected as the indication arose. This technic permits the maintenance of an even anesthesia, and because of the rapidity of the destruction of the drug makes sodium pentothal anesthesia as controllable[17] and as safe as inhalation anesthesia. The second fundamental improvement was the wide adoption of the continuous administration of oxygen during anesthesia. It has been shown that the barbiturates affect the respiration by decreasing its depth. For this reason adequate oxygenation during a barbiturate anesthesia can be obtained only by employing a concentration of oxygen higher than that of the atmosphere.

Premedication and Administration.—Patients with cataract are admitted to the hospital twenty-four hours prior to the operation. Seconal, gr. 1½, at bedtime, is given on the night before the operation. Irrigation of the nasolacrymal duct is done on the day before the operation; topical instillation three times daily, of a chemotherapeutic medication to insure nonpathogenic conjunctival flora. The eye to be operated upon is prepared in the usual manner, and the brow is plainly marked with a staining solution. A thorough cleansing enema is given on admission to the hospital. If necessary, a laxative is also given. It is my custom to operate at 7:30 a.m. Obviously, breakfast is withheld from the patient.

The patient is operated upon in a special cataract bed, which is rolled into the operating room. Under no circumstances are sandbags used. Side gates are used only when ordered. Atropine sulfate, gr. 1/100, is given preoperatively to minimize the excessive tracheobronchial secretions and, by decreasing vagal tone, to act as a prophylactic agent against transitory hiccoughing, sneezing and laryngeal spasm, which have been attributed to the presence of mucous in the larynx and to improper speed of injection of the anesthetic drug. Demerol, 100 mg., is also given preoperatively, as is Thorazine, 25 mg. preoperatively and postoperatively, reducing considerably the very disturbing vertigo, nausea and vomiting. Homatropine and Paredrine are instilled on the night before and the morning of the operation.

Adriani and Rovenstine,[21] in their experimental study, showed that pentothal produces a constrictor effect upon the bronchial musculature through parasympathetic stimulation, an effect that can be prevented by the use of atropine sulfate. As a rule, from 4 to 8 cc. of a 2.5 per cent solution is required for induction of anesthesia, with the additional administration of 1 or 2 cc. as the indication arises. My average was 32.2 cc. Lundy[2] has devised a "cotton butterfly" which he attaches to the patient's upper lip so that the movement of air through the nostrils may be visualized.

Oxygen should be administered throughout the anesthesia by intranasal catheter. After the operation the patient must be attended until the reflexes return. It usually is necessary to support the jaw during part of this procedure. Lundy has advised, wisely enough, the continuous administration of oxygen until signs of recovery appear. I have observed that the recovery time is hastened by using atropine alone, without morphine. Topical instillation of 4 per cent cocaine prior to injection of the intravenous anesthetic also reduces the amount of pentothal nec-

essary to obtain good results.

Statti[22] recommended the use of an ampule of coramine to every 25 cc. of pentothal employed. Raiford[23] advises, upon completion of the cataract extraction, the injection of a large amount (10 cc.) of coramine to insure the recovery of the patient from the anesthesia even before he leaves the operating room.

Kronfeld[24] advised me that he is now using intravenous pentothal sodium anesthesia for over 40 per cent of his cataract extractions; McLean[25] is using it in approximately 25 per cent.

Operative Technic.—I have frequently tried the excellent preplaced and postplaced appositional corneoscleral sutures of Verhoff, McLean, Perrara and others, only to return to the double Stallard with the Greishaber needles. I now routinely employ the splendid Bell erisophake and tumble the lens. The rubber bulb is frequently replaced in order to insure adequate suction (negative pressure). The Arruga intracapsular forceps is kept readily available in the event that the grasp of the erisophake is lost. Then the lens is delivered by the sliding technic of Kirby or the tumbling method. Postoperative anaphylactic reaction to the cortical lens protein is minimized by systemic cortisone.

I have not been aware of reduced healing time for the wound edges when cortisone is used. The usual toilet of the wound is performed with the repositor. The well-done cataract operation is not complete unless the pupil is round and the anterior chamber is adequately reformed with either saline solution or air. My personal preference is air, as there seems to be less tendency toward collapse. After uneventful extractions, eserine, 0.25 per cent, is administered. In complicated cases, i.e., when there are cortical remnants in the anterior chamber atropine is used.

Management of Postoperative Cataracts.—The first dressing is applied one hour after the operation to reassure both the patient and the surgeon that things are going satisfactorily. I definitely do not subscribe to the "delayed dressing principle," as this all too frequently precipitates "occlusion psychosis." On the first postoperative day, if all goes well, the patient's healthy eye is unpatched and he is given pinhole glasses that limit the extraocular rotations and excursions which could conceivably open up the wound. A collapsed chamber requires immediate (1) bed rest with heavy sedation; (2) insufflation with air following, of course, topical anesthesia; (3) light cauterization of the wound edges with a silver nitrate stick; (4) patching of both eyes, and (55) atropinization.

A rare complication, prolapsed iris, is immediately excised. The patient is permitted out of bed on the day after the operation and discharged on the fourth day, provided the convalescence has been uneventful. Corneoscleral sutures are removed in the office on the tenth postoperative day. Temporary aphakic correction is ordered early. A permanent lens three to six months after the operation.

Because of the incidence of laryngospasm, coughing, sneezing and hiccoughing, however small (approximately 5 per cent) in conjunction with Dr. J. Morgan Schwab, chief of the department of anesthesia, I used pentothal with curare in 93 cases during 1949 and 1950. In this series the amount of pentothal given was reduced 23 per cent. Interestingly enough, the average reduction of intraocular pressure was 7.5 mm. of mercury by Schiotz tonometric tests. Laryngospasm and other such complications are much less prone to occur with the pharyngeal airway when curare was used. Rarely had we encountered severe and disturbing postoperative nausea and vomiting.

Concerning the use of curare with pen-

tothal, Dr. Schwab made the following observations: "There are certain disadvantages to this technic and they are as follows: On occasion we have had sufficient respiratory depression and loss of intercostal function so that it was at times difficult to maintain the patient in a condition of sufficient oxygenation. This, however, was rare and should not occur if the dosage is watched carefully and large increments are not given at any one time. On occasion, I have felt that the addition of curare had produced an increase in the amount of vasomotor depression as noted by the fall in blood pressure. This was a real disadvantage, and it usually was impossible to supplement respiratory excursions by manual means, since these patients were not intubated. In fact, this was a major drawback, because the operative procedure must be discontinued in order to apply the mask to the patient's face and produce artificial respiration. On two occasions this was quite trying, and the patient became unnecessarily cyanosed before we were able to augment the depth of respiration by the application of oxygen."

When my series began, I was at first very enthusiastic about the administration of curare along with pentothal and thought it had a great deal to offer. However, as the series grew larger, I became more and more convinced that it is perhaps not as efficacious and does not have some of the marked advantages I had first attributed to it. In fact, I gradually swung around to the view that pentothal in conjunction with nitrous oxide and oxygen is probably preferable to a combination of curare and pentothal.

The current administration of an oxygen-rich mixture of nitrous oxide by inhalation with pentothal greatly enhances the effect of the latter, reduces the total requirement of the drug and provides better oxygenation and smoother anesthesia, with less tendency to discomfiting respiratory depression, because of the reduction in the amount of pentothal required.

Mortality.—There were 2 deaths in the operating room in this series of 748 cataract extractions with sodium pentothal. It must be borne in mind that all patients had had a complete physical inventory before coming to operation and had been approved by an internist for operation with pentothal. The following is the report of the anesthesiologist, Dr. Schwab, on these cases:

"Mrs. E. D., aged 58 years, underwent an uneventful intracapsular cataract extraction (left eye) on May 11, 1950, under pentothal with curare. Twenty cc. of pentothal was employed. The operation was uneventful, as was the convalescence. The patient was discharged on the sixth postoperative day.

"Five months later the patient presented herself for the second cataract extraction. Vision in the left eye was 95 per cent. Physical examination negative, revealed no abnormality; the patient was again released for operation with general anesthesia. She was admitted to the hospital on Oct. 16, 1950. Prior to anesthesia the patient stated that she 'felt fine' and was looking forward to another successful operation.

"She was given 5 cc. of pentothal, after which she raised her head and reported that she was not yet asleep. This was no surprise to me, as I did not expect her to be asleep. The blood pressure and pulse rate were checked and observed to be normal. After administration of 3 cc. more of pentothal the respiration stopped, the heart action stopped and we were unable to revive the patient. In my opinion this cannot be considered an anesthetic death. It is virtually impossible, in my opinion, to lose a patient because of only 8 cc. of pentothal. We were unable to obtain a

postmortem study in this case, but it is my opinion and impression that we were dealing with pulmonary, coronary or cerebral embolism. The same outcome might have occurred if the operation had been done with local anesthesia."

Concerning the second death, that of Mr. S. M., aged 80, the following is a report of the anesthesiologist:

"This 80-year-old patient had been on the operating table, undergoing cataract extraction, for approximately thirty minutes, when suddenly the blood pressure, pulse and respirations ceased. Blood pressure and pulse rate did not provide any evidence of anoxia. The characteristic picture of deepening anoxia is that of increasingly fast pulse, elevation of blood pressure followed by sudden bradycardia arrhythmia and then cardiac arrest. None of these phenomena was noted on the chart. I cannot say that this patient did not die as a result of asphyxia, but, on the other hand, from examination of the chart it seems unlikely. A more common mechanism would be that of coronary occlusion, or possibly coronary insufficiency, with the fall of blood pressure from 160 to 110. However, the pulse was well maintained, and it would appear that the cardiac output and coronary oxygenation were adequate prior to the time of death."

Conclusion.—None of the patients considered the anesthesia was in any way unpleasant. Most were agreeably surprised at the ease with which they went to sleep and at the remarkable freedom from unpleasant after-effects so commonly experienced after inhalation anesthesia. In my opinion, intravenous pentothal sodium anesthesia is highly satisfactory for cataract extractions from the standpoint of both the patient and the surgeon.

A series for a statistical report was started last year, intravenous pentothal sodium anesthesia being supplemented with hyaluronidase (Wydase). The retrobulbar hyaluronidase and procaine provide adequate local anesthesia, thus reducing the amount of pentothal required. The smaller amount of pentothal is used to obtain amnesia only, not analgesia. The series thus far indicates a reduction of 66 per cent in the amount of pentothal required.

A preliminary report[26a] of this study was read before the Fourth Pan American Congress of Ophthalmology, Mexico D. F., Mexico, on Jan. 10, 1952, also read at the Fifth Annual Wills Eye Hospital Conference[26b] on March 20, 1952. Four hundred and twelve cataract extractions were reported. A motion picture film accompanied both papers.

SUMMARY

A brief review of the literature on intravenous pentothal sodium anesthesia is presented, together with statistical data. The number of cataract extractions with pentothal sodium anesthesia since the series began in April 1946 was brought up to 748 as of March 1, 1955. One hundred and thirty-one were performed in 1954. It is the author's opinion that the results have been satisfactory.

RIASSUNTO

Assieme ad una breve revista della Letteratura vengono riferiti dati statistici sull'anastesia con pentothal. Dall'aprile 1946 al marzo 1955 l'autore ha eseguito, in anestesia pentothalica, 748 operazioni per cataratta, 131 delle quali nel 1954. I risultati furono soddisfacenti.

ZUSAMMENFASSUNG

Es wird ein kurzer Überblick über das Schrifttum über Narkose mit intravenöser Verabreichung von Pentothalnatrium zusammen mit einer Reihe statistischer Angaben vorgelegt. Die Gesamtzahl einer

im April 1946 begonnenen Reihe von Kataraktentfernungen unter Pentothalnatriumnarkose betrug am 1. März 1955 748. Davon wurden 131 im Jahre 1954 ausgeführt. Der Verfasser hält die Ergebnisse für zufriedenstellend.

RÉSUMÉ

Une brève revue de la littérature sur l'anesthésie intraveineuse au pentothal sodium est présentée de concert avec des données statistiques. Le nombre total d'extractions de cataractes avec anesthésie au pentothal sodium, depuis le début des séries en avril 1946, atteignait 748 le 1er mars 1955. Cent trente et une furent exécutées en 1954. L'auteur pense que les résultats ont été satisfaisants.

SUMARIO

É apresentada uma revisão rápida da literatura sôbre anestesia com pentotal sódico endovenoso, juntamente com dados estatísticos. O número total de extrações de catarata com anestesia por pentotal sódico desde o início da série, em 1946, chegou a 748, até 1° de Março de 1955. Cento e trinta e um casos foram executados em 1954. O autor acredita que os resultados tenham sido satisfatórios.

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Management of the Narrow Angle Glaucoma

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THE classification of the primary glaucoma into the open angle and the narrow angle types was advocated by the American Academy of Ophthalmology and Otolaryngology in 1949, and this classification has been generally accepted in the United States. It was Raeder[1] in 1923 who first suggested a classification based on the depth of the anterior chamber. However, Barkan[2] in 1938 devised a classification based on the depth of the angle of the anterior chamber as viewed with the gonioscope.

In the wide angle type the angle is open but the increased intraocular tension seems to be the result of an obstruction to outflow which is apparently localized within the trabeculum or within the Schlemm's canal mechanism, with its outflow channels, or both. The obstruction to outflow in the presence of narrow angle glaucoma is the result solely of the blockage to the angle caused by contact between the periphery of the iris and the trabeculum. This closure is preceded by narrowing of the angle. The closure of the angle may be temporary and reversible or permanent because of peripheral anterior synechiae. It has been noted in cases of narrow angle glaucoma that the tension is normal when the angle is open and the filtration apparatus is normal. The narrow angle glaucomas are the potential or active congestive glaucomas, although congestion is rarely present in the early stages of acute glaucoma.

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This fundamental difference in the mechanism of narrow angle and wide angle glaucoma has been reemphasized tonographically. Grant[3] and others have noted that obstruction to outflow in cases of open angle glaucoma is a rather constant factor which is unchanged whether the tension is normal or elevated spontaneously diurnally or by artificial induction. With the narrow angle glaucoma, on the other hand, the obstruction to outflow is proportionate to the height of the tension and the degree of closure of the angle; when the angle is open, the facility of outflow is normal.

The principal anatomic factor responsible for the narrow angle is the size of the lens; that is, the relative size of the lens to the anterior segment. In eyes with small corneas a normal-sized lens creates an abnormally shallow anterior chamber, while in eyes with normal-sized corneas the lens is unusually large. However, certain precipitating factors are necessary to provoke contact between the periphery of the iris and the angle, with resultant closure of the angle and glaucoma. Mydriasis resulting from any factor will provoke a rise in tension, and this is the basis of the darkroom and other tests provocative of pupillary dilation in patients with narrow angle glaucoma. Sugar[4] has observed gonioscopically a narrowing of the angle during accommodation in prepresbyopic subjects. The most important precipitating factor, however, is the relative pupillary block or functional seclusion of the pupil. Curran[5] suggested that, since the aqueous humor formed by the ciliary body passes between the iris and the lens and

then through the pupil to the outlets at the angle of the anterior chamber, it should be presupposed that there is a slight increase in pressure in the posterior chamber over that in the anterior chamber. Chandler[6] has demonstrated that in the normal eye the iris is in contact with the lens only in a narrow zone around the pupillary border, while in the eye with a narrow angle and a shallow anterior chamber the iris is molded over the surface of the lens for a much greater area from the pupillary border. The iris in the narrow angle eye is exerting a backward pressure, and a relative iris bombé with a shallow anterior chamber exists. It is presumed, therefore, that a greater than normal difference in pressure between the posterior and anterior chambers must be present in these eyes. It can be seen that this greater pressure in the posterior chamber may lead to a forward bulging of the iris at the periphery of the anterior chamber, with further narrowing of the angle. Elschnig[7] concluded that "peripheral anterior synechiae can come about only by means of a pressure difference between the posterior and the anterior chamber, an explanation which explains completely the acute onset of incompensation, the acute attack, and its manifestations." Ulbrich,[8] Heine,[9] and Urbanek[10] reported cases in which a thinned area of the iris periphery bulged forward, suggesting that the pressure in the posterior chamber is greater than that in the anterior chamber. Heine[9] observed that the bulging forward of the iris periphery disappeared with cocaine mydriasis but reappeared with physostigmine miosis. It is presumed that the mydriasis reduces the resistance to flow between the posterior and anterior chambers by diminishing the area of contact between the iris and the lens, while with miosis the contact area between the lens and the iris is increased and resistance to free flow through the pupil is therefore increased also. Chandler[6] reported the case of a patient with a narrow angle glaucoma in whom an acute attack was precipitated by a strong solution of physostigmine. Several cases have been reported[11] in which strong miotics, particularly diisopropyl fluorophosphate, have caused an acute rise in tension. It must not be inferred, however, that dilation is suggested as treatment of the narrow angle glaucoma, although I have observed a case in which complete dilation reduced the intraocular tension by relieving the pupillary block. Ordinarily, of course, dilation of the pupil may precipitate an acute attack, since during the process of dilation the peripheral iris bulges forward sufficiently to close the angle even though the relative pupillary block has been reduced. The closure of the angle may lead to peripheral anterior synechiae and an acute congestive attack. It is well known that miotics, by constricting the pupil, may relieve such an attack. Why the apparent paradox? The miotics will pull the iris away from the angle, thereby opening the angle provided the angle is not closed completely by the peripheral anterior synechiae. The miotics increase the resistance to flow from the posterior to the anterior chamber but also, by putting the iris under tension, enables this tissue to resist the tendency to bulge forward by reason of the greater pressure in the posterior chamber. It can be surmised, therefore, that miotics are considerably more effective in eyes with healthy iris tissue than in eyes with atrophy.

For the proper management of the narrow angle glaucoma, one must differentiate it from the open angle mechanism. Shallow anterior chambers do not necessarily imply narrow angles. The obstruction to outflow in cases of narrow angle glaucoma is due to blockage to the angle, while in cases of open angle glaucoma the obstruction is in the trabeculo-Schemm's

filtration mechanism. Gonioscopic study is the most accurate means of differentiation.

Narrow angle glaucoma may be classified into two types; the acute congestive and the subacute or chronic, although one form may merge into the other.

The clinical picture of the acute congestive glaucoma is well known. One must differentiate the lesion, however, from the acute hemorrhagic glaucoma following thrombosis of a central vein and from glaucoma rubeosa with diabetic retinopathy. Glaucoma secondary to acute iritis may lead to confusion. The presence of cells in the anterior chamber is frequently noted, and posterior synechiae are infrequently noted in the acute congestive attack. However, the anterior chamber is not usually shallow or the angle narrow in the presence of acute iritis. The glaucomatocyclitic crisis occurs in an eye with an open angle and a normal anterior chamber depth; a few keratitic precipitates are seen on the posterior surface of the cornea. An acute attack of narrow angle glaucoma may develop in an eye with normal axial depth of the anterior chamber; however, gonioscopically the angle will appear closed. Fine white opacities in the anterior surface of the lens, as described by Vogt,[12] may appear during an acute attack or may be seen as evidence of previous attacks. Patchy losses of iris pigment in an eye with a shallow chamber is confirmatory evidence of previous acute attacks.

Changes in the visual field and cupping of the optic disc are not observed in the acute attack unless it has been unrelieved for at least two weeks. The presence of these changes, therefore, will point to an acute exacerbation of chronic glaucoma.

The chronic narrow angle glaucoma is sometimes easily confused with the open angle glaucoma. The fluctuations in tension and the initial tension are much greater in the narrow angle glaucoma. Miotics are more effective in reducing the tension in the narrow angle glaucoma. Gonioscopic study is of considerable help in the differentiation; during the rise in tension, a good portion of the angle is seen to be closed in the narrow angle, while in open angle glaucoma the angle is always open, even with the tension elevated. Tonographic study is most helpful. It will reveal a normal outflow in the opposite clinically normal eye of a patient with narrow angle glaucoma while in the patient with open angle glaucoma the fellow eye, clinically normal, will show some obstruction to outflow. Barkan[13] has reported observing, in some cases of narrow angle glaucoma, a "secondary" trabecular pigment band and sclerosis of the trabeculum, which, he states, is the result of previous contact between the angle wall and the root of the iris. In these cases tonographic examination showed a reduced outflow in the presence of an open angle.

The clinical course of the acute narrow angle glaucoma is well known. There may be one or several prodromal attacks, with peripheral anterior synechiae developing during each attack. When the final attack occurs, the angle is completely closed. During the attack, loss of vision may be severe if the eye is untreated for any length of time. Periods of elevated tension occur more frequently with the chronic form of the narrow angle glaucoma, and gonioscopically in this type one notes that certain portions of the angle are deeper than other portions.

Treatment of narrow angle glaucoma in its early stages is paramount. The vicious circle of pupillary block or "physiologic" iris bombé, increased narrowing of the angle, and increased shallowness of the anterior chamber with secondary anterior displacement of the lens and closure of the angle must be broken. The effectiveness of miotic therapy depends upon how well

the iris is put on the stretch and pulled away from the angle; if extensive peripheral anterior synechiae have developed, miotic therapy will be unsuccessful.

In my opinion, physostigmine or pilocarpine used separately every ten or fifteen minutes for two or three hours is a sufficient test for the miotic treatment of an acute glaucoma. Swan[14] has shown that the maximum effect of the miotic drug is achieved when the miotics are administered singly; otherwise the drugs seem to "compete" except when used in submaximal doses. Dibenamine,® which induces miosis by relaxation of the iris dilator (paralytic miosis) and temporarily depresses the formation of aqueous, may effect a drop in the ocular tension, and its use in certain types of acute glaucoma has been advocated by Swan.[15] Becker[16] has suggested the use of Diamox,® which may produce a dramatic drop in the ocular tension by inhibition of the rate of inflow of aqueous. Xylocaine® (2 per cent) containing epinephrine (1:100,000) in a 1.5 to 2.0 cc. retrobulbar injection is frequently effective in reducing the ocular tension and is reported to have a longer and more profound effect than procaine.[17] If medical treatment brings the tension to normal, operation may be postponed for several days, until the eye is relatively quiet. Chandler[6] has stated that "a trial of miotics for six to twelve hours without evidence of substantial lowering of tension is unjustified and may result in the permanent loss of vision." A single attack of acute glaucoma is an indication for surgical therapy. It is important that miotics be instituted in the fellow eye during the initial attack, since it too is most probably a narrow angle eye. However, if the fellow eye is of the narrow angle type it too should be operated on unless the patient is in the very old age group, in which surgical hazards may exist.

The treatment of the narrow angle glaucoma is therefore essentially surgical. Von Graefe proposed iridectomy for acute glaucoma. It is generally recognized, however, that unless the tension is brought within normal limits within the first twenty-four to forty-eight hours the iridectomy will probably be unsuccessful, since the angle will have been closed by peripheral anterior synechiae. The full iridectomy usually results in irregular postoperative astigmatism, and, although corrected, the vision will not be as distinct as that of the fellow eye.

Iridectomy equalizes the pressures in the anterior and posterior chambers and deepens the angle throughout its circumference. Barkan[18] has shown that this is associated in many cases with retroplacement of the lens and deepening of the axial depth of the anterior chamber.

Curran[5] in 1920 and Bänziger[19] in 1922 advocated peripheral iridectomy in the treatment of narrow angle glaucoma. Haas and Scheie,[20] Chandler,[6] and Barkan[18] have recently reported excellent results with peripheral iridectomy in an initial attack of acute glaucoma less than thirty-six hours in duration, as well as in any case in which the tension came to normal spontaneously or was brought to normal with miotics.

In some cases miotics may still be required after peripheral iridectomy. Barkan[13] has stated that miotics have an increased effectiveness after the operation, as a result of relief of the bombé and the unfolding of the root of the iris in the angle. He has also shown that the incomplete action of the iridectomy in these cases may be due to a "secondary" trabecular pigment band and sclerosis of the trabeculum resulting from previous contact between the angle wall and the root of the iris. Although the angle is open in these cases after the operation, tonographic study shows a reduced outflow.

The technic of peripheral iridectomy I prefer is as follows: The usual preliminary measures are carried out, including the use of a superior rectus bridle suture. A small conjuctival flap is dissected to the superior limbus. A scratch incision with a Bard-Parker knife is made 2 mm. from the limbus and beveled toward the cornea. A McLean type suture is placed when the incision is approximately halfway through the sclera. The scratch incision is then continued until the sclera has been perforated. A small leakage of aqueous will occur, and the incision is then carefully enlarged with a fine corneal scissors to a length of 3 or 4 mm. If the iris does not prolapse spontaneously, toothless iris forceps are introduced into the anterior chamber, and the iris is grasped in the extreme periphery and gently withdrawn. The iridectomy is then performed by cutting the iris with the iris scissors as close as possible to the tip of the iris forceps. The iris is replaced by stroking the cornea with an iris repositor. I am convinced that this procedure is considerably safer and fraught with fewer operative complications than is the practice of causing prolapse of the iris in the wound by external pressure upon the eyeball. The McLean type suture is tied tightly, and the conjunctiva is closed with one or two sutures. The success of the operation depends upon prompt restoration of the anterior chamber.

The iridectomy procedure is generally unsuccessful in an acute glaucomatous attack of forty-eight hours' duration or longer when the miotics have not brought the tension within normal limits. In these cases filtering operations are advocated. The hazards of injury to the lens or herniation of the lens are sufficient to justify rejection of the trephine operation. Iridencleisis is probably the most popular operation and is generally successful. In some cases, however, although fortunately uncommon, the iridencleisis is not only unsuccessful but the glaucoma may be made worse. In these cases the anterior chamber remains flat for several days and a filtration bleb does not develop. It is in such cases that Chandler[6] has advocated the following procedure rather than the iridencleisis: A scratch incision is made, with two preplaced sutures. A cyclodialysis spatula is introduced into the incision and passed down on either side to the 3 o'clock and 9 o'clock positions in an attempt to free the recently formed peripheral anterior synechiae. A peripheral iridectomy is then done, and the incision is tightly closed. The anterior chamber is immediately reformed with air through a previously prepared slanting incision in the lower part of the cornea.

Stallard[21] has described an anterior flap sclerotomy with basal iridencleisis, a procedure which I prefer to the ordinary iridencleisis for the acute glaucoma of longer than forty-eight hours' duration and in which the tension is not reduced with miotics. The operation consists of a hinged scleral flap 5 mm. in length and 2 mm. from the limbus; inserting a cyclodialysis spatula to free the upper angle of the anterior chamber, and including between the lips of the scleral flap a tongue of iris attached at its root, and the pupil being left intact. The conjunctival flap, previously made, is then tightly sutured. I have noted the development of a good filtration bleb after this procedure.

It is generally known of narrow angle glaucoma that the fellow eye will probably eventually suffer an acute attack in spite of the continued use of miotics. Peripheral iridectomy, therefore, is strongly advocated for the fellow eye during the time that the tension is controlled.

In the medical treatment of the chronic narrow angle glaucoma it is important to prevent any periodic elevation of tension

by employing a miotic of such strength as will control the tension at all times. Peripheral anterior synechiae must be prevented or disrupted by the occasional induction of intense miosis.

The surgical treatment of the chronic narrow angle glaucoma will depend to a large extent upon the age of the patient and the stage of the disease. Peripheral iridectomy is indicated almost regardless of the patient's age when the tension is controlled with miotics and the cupping of the optic disc, with its accompanying field changes, are minimal. In borderline cases with moderate loss of field, the peripheral iridectomy may be done at the 10 o'clock or the 2 o'clock position. Miotics will have an increased effectiveness after this procedure. A filtering operation can be done at the 12 o'clock position if the tension is still uncontrolled with the use of miotics. However, if the disease is advanced and there are extensive peripheral anterior synechiae, a filtering operation, such as iridencleisis, or, preferably, the anterior flap sclerotomy with basal iridencleisis is advocated. In my opinion the scratch incision should be the only means of entry to the anterior chamber in any surgical procedure for narrow angle glaucoma. The use of the toothless iris forceps is strongly advised for all glaucoma operations. Cyclodialysis without iridectomy is not advocated for narrow angle glaucoma.

SUMMARY

In the presence of a narrow angle glaucoma the obstruction to outflow is the result solely of blockage to the angle by contact between the periphery of the iris and the trabeculum. In the wide angle type, the angle is open, but the increased intraocular tension seems to be the result of an obstruction to outflow that is apparently localized within the trabeculum or within Schlemm's canal mechanism, with its outflow channels, or both.

The principal anatomic factor responsible for the narrow angle is the size of the lens, i.e., the size of the lens in relation to the anterior segment. The most important precipitating factor in narrow angle glaucoma, however, is the relative pupillary block, or functional seclusion of the pupil, or abnormal resistance to flow from the posterior to the anterior chamber.

The clinical picture of the acute congestive glaucoma is well known. The presence of cells in the anterior chamber is frequently noted, and posterior synechiae are infrequently noted in an acute congestive attack. The anterior chamber, however, is not usually shallow or the angle narrow in cases of acute iritis. Patchy losses of iris pigment in an eye with a shallow chamber is confirmatory evidence of previous acute attacks.

The chronic narrow angle glaucoma is sometimes easily confused with the open angle glaucoma. The fluctuations in tension and the initial tension are much greater in cases of narrow angle glaucoma. Gonioscopic study is of considerable help in the differentiation; during the rise in tension, a good portion of the angle is closed in the cases of narrow angle glaucoma, while with open angle glaucoma the angle is always open, even with the tension elevated. Tonographic study is most helpful.

Peripheral iridectomy is recommended as the surgical treatment of acute glaucoma when the tension is brought within normal limits by medical therapy. For cases in which the tension is insufficiently controlled by miotics, iridencleisis or iridencleisis with a hinged scleral flap is advocated. Chandler has done a modified basal iridectomy in such cases.

The treatment of the chronic narrow angle glaucoma is discussed. Peripheral anterior synechiae must be prevented or disrupted by the occasional induction of

intense miosis. The surgical treatment will depend to a large extent upon the age of the patient and the stage of the disease. The miotics will have an increased effectiveness after peripheral iridectomy in the borderline stages of the disease; if the disease is advanced, however, with extensive peripheral anterior synechiae, a filtering operation such as iridencleisis or, preferably, anterior flap sclerotomy with basal iridencleisis is advocated.

ZUSAMMENFASSUNG

Beim Glaukom bei engem Winkel ist die Abflusshemmung ausschliesslich die Folge der Blockierung des Winkels durch Kontakt der Regenbogenhautperipherie mit dem Trabekulum. Bei der weitwinkligen Form ist der Winkel offen, aber der erhöhte innere Augendruck scheint die Folge einer Abflussbehinderung zu sein, die offenbar innerhalb des Trabekulums oder des Schlemmschen Kanalapparates mit seinen Abflusswegen oder innerhalb beider gelegen ist.

Der hauptsächlich für die Verengung des Winkels verantwortliche anatomische Faktor ist die Linsengrösse, d. h. die Grösse der Linse in Beziehung zum vorderen Segment. Die wesentlichste Rolle für das Zustandekommen des Glaukoms bei engem Winkel jedoch spielt die relative Blockierung oder die funktionelle Absperrung der Pupille oder ein unnormaler Widerstand, der den Abfluss von der vorderen in die hintere Kammer erschwert.

Das klinische Bild des akuten Stauungsglaukoms ist wohlbekannt. Häufig finden sich Zellen in der vorderen Kammer und gelegentlich bestehen hintere Verklebungen bei einem akuten Stauungsglaukomanfall. In Fällen von akuter Regenbogenhautentzündung ist jedoch im allgemeinen die vordere Kammer nicht flach und der Winkel nicht eng. Fleckige Pigmentverluste der Iris in einem Auge mit flacher Kammer stellen einen Befund dar, der das Bestehen früherer akuter Anfälle bestätigt.

Das chronische Glaukom bei engem Winkel kann manchmal leicht mit einem Glaukom bei offenem Winkel verwechselt werden. Die Druckschwankungen und der anfängliche Druck sind viel grösser als in Fällen on Glaukom mit engem Winkel. Winkelmessungen unterstützen die Differentialdiagnose beträchtlich; in Fällen von Glaukom bei engem Winkel wird beobachtet, dass während des Ansteigens des Druckes ein erheblicher Teil des Winkels geschlossen ist, während beim Glaukom mit offenem Winkel der Winkel ständig, d. h. auch bei erhöhtem Druck, geöffnet ist. Tonographische Untersuchungen sind eine grosse Hilfe.

Die periphere Iridektomie empfiehlt sich als chirurgische Behandlung des akuten Glaukoms, wenn der Druck sich mittels medikamentöser Behandlung in normale Grenzen bringen lässt. In Fällen, wo der Druck mit pupillenverengernden Mitteln nicht genügend reguliert werden kann, wird die Iridenkleisis mit oder ohne drehbarem Skleralappen empfohlen. Chandler hat in solchen Fällen eine modifizierte basale Iridektomie ausgeführt.

Es folgt eine Erörterung der Behandlung des chronischen Glaukoms bei engem Winkel. Periphere vordere Verklebungen müssen durch gelegentliche Einleitung einer intensiven Pupillenverengung vermieden oder gelöst werden. Bei der chirurgischen Behandlung spielt das Alter des Kranken und das Stadium der Erkrankung eine grosse Rolle. Im Übergangsstadium der Krankheit zeigen die pupillenverengernden Mittel eine erhöhte Wirksamkeit nach erfolgter peripherer Iridektomie; in vorgeschrittenen Fällen mit erheblichen peripheren vorderen Verklebungen jedoch empfiehlt sich ein operativer Filtrierungseingriff wie die Iridenkleisis oder vor-

zugsweise die vordere Lappensklerotomie mit basaler Iridenkleisis.

RÉSUMÉ

Dans le glaucome avec angle étroit, l'obstacle à l'écoulement ne résulte que du blocage de l'angle par contact, entre la périphérie de l'iris et le trabéculum. Dans l'angle du type large, l'angle est ouvert, mais la tension intraoculaire augmentée semble résulter d'une obstruction à l'écoulement, apparemment localisée dans le trabéculum ou dans le fonctionnement du canal de Schlemm ou les deux à la fois.

Le principal facteur anatomique responsable de l'angle étroit est la dimension du cristallin, c'est-à-dire sa dimension par rapport au segment antérieur. Cependant, le facteur aggravant le plus important dans le glaucome avec angle étroit, est constitué par le blocage relatif de la pupille, soit par son exclusion fonctionnelle, soit par résistance anormale à l'écoulement de la chambre postérieure à la chambre antérieure.

L'image clinique du glaucome congestif aigu est bien connue. On note fréquemment la présence de cellules dans la chambre antérieure et rarement des synéchies postérieures, dans une attaque congestive aiguë. En cas d'iritis aiguë, cependant, la chambre antérieure n'est pas habituellement basse, ni l'angle étroit. La perte par endroits de pigment dans l'iris d'un oeil avec chambre antérieure peu profonde confirme une attaque aiguë antérieure.

Le glaucome chronique avec angle étroit est parfois aisément confondu avec le glaucome avec angle ouvert. Les fluctuations de la tension et la tension initiale sont beaucoup plus élevées en cas de glaucome avec angle étroit. L'étude gonioscopique apporte une aide considérable dans le diagnostic différentiel; durant l'augmentation de la tension, on voit, en cas de glaucome avec angle étroit, la fermeture d'une bonne partie de l'angle, tandis que dans le glaucome avec angle ouvert, l'angle est toujours ouvert même en cas de tension élevée. L'étude tonographique est extrêmement utile.

L'iridectomie périphérique est recommandée comme traitement du glaucome aigu lorsque la tension est amenée dans les limites normales par la thérapeutique médicale. Pour les cas où la tension est insuffisamment influencée par les myotiques, il est plaidé en faveur de l'iridencleisis ou de l'iridencleisis avec un lambeau scléral. Chandler a fait, dans de tels cas, une iridectomie basale modifiée.

Le traitement du glaucome chronique avec angle étroit est discuté. On doit prévenir ou rompre les synéchies antérieures périphériques par l'installation éventuelle d'une myosis intense. Le traitement chirurgical dépendra dans une large mesure de l'âge du patient et de la phase de la maladie. Les myotiques auront une efficacité accrue après iridectomie périphérique dans les stades extrêmes de la maladie; cependant, si la maladie est avancée, avec synéchies antérieures périphériques extensives, il est plaidé en faveur d'une opération filtrante telle que l'iridencleisis ou, de préférence, sclérotomie avec lambeau antérieur et iridencleisis basale.

RESUMEN

En presencia de glaucoma de ángulo agudo, la obstrucción del aflujo es el resultado del bloqueo angular por contacto entre la periferia del iris y el trabeculum. En el glaucoma de ángulo abierto, el tipo del ángulo es en ésta forma, pero el aumento de la presión intraocular parece ser el resultado de una obstrucción al aflujo, aparentemente localizada en el interior del trabeculum o al mecanismo del conducto de Schlemm, con sus canales para el aflujo, o en ambos.

El factor anatómico principal, responsable del ángulo agudo, es el tamaño del cristalino, es decir, el Tamaño del cris-

talino en relación con la cámara anterior. En factor más importante para producir el glaucoma de ángulo agudo es sin embargo el bloqueo pupilar relativo, la exclusión funcional de la pupila, o la resistencia anormal del aflujo de la cámara posterior hacia la cámara anterior.

El cuadro clínico del glaucoma agudo congestivo es bien conocido. Frecuentemente se nota la presencia de células en la cámara anterior; así como sinequias posteriores más rara vez en el ataque congestivo agudo. Sin embargo, la cámara anterior generalmente es profunda o de ángulo agudo en los casos de iritis aguda. Las pérdidas de pigmento del iris en un ojo con una cámara poco profunda son evidencia de ataques agudos anteriores.

El glaucoma crónico de ángulo agudo se confunde fácilmente con el glaucoma de ángulo abierto, siendo más grande las fluctuaciones en la tensión y la tensión inicial en los casos de glaucoma de ángulo agudo. Para su diferenciación es de considerable ayuda el estudio gonioscópico; durante el aumento tensional, se ve cerrada una buena porción del ángulo en los casos de glaucoma de ángulo agudo, mientras que en glaucoma de ángulo abierto, dicho ángulo permanece en esta forma aún cuando la tensión se eleve. La mayor ayuda es el estudio tonográfico.

El tratamiento quirúrgico que se recomienda para el glaucoma agudo cuando la tensión se vuelve a límites normales por el tratamiento médico es la iridectomía periférica. Se recomienda la iridencleisis con un colgajo de esclerótica para los casos en lo cuales la tensión no se controla por los mióticos. Chandler ha efectuado iridectomías modificadas en tal es casos.

Se discute el tratamiento del glaucoma crónico de ángulo agudo. Deben evitarse o disociarse las sinequias periféricas anteriores por inducciones ocasionales de miosis intensas. El tratamiento quirúrgico depende de la edad del paciente y el estadió de la enfermedad. Los mióticos tienen una efectividad mayor después de la iridectomía periférica en los casos incipientes; sin embargo, si la enfermedad está avanzada con extensas sinequias anteriores periféricas, se recomienda una operación tal como la iridencleisis o preferiblemente su modificación con colgajo de esclerótica.

SUMARIO

Na presença de um glaucoma de ângulo agudo a obstrução ao fluxo é ùnicamente o resultado do bloqueio do ângulo entre a periferia da iris e o trabeculum. No tipo de ângulo obtuso o ângulo é aberto, mas a tensão intraocular aumentada parece ser o resultado de uma obstrução ao fluxo aparentemente localizada dentro do trabeculum ou dentro do mecanismo do canal de Schlemm, com seus canais de eliminação, ou ambos.

O principal fator anatômico responsável pelo ângulo agudo é o tamanho do cristalino, ou seja, o tamanho do cristalino em relação ao segmento anterior. O fator desencadeante mais importante neste tipo de glaucoma é, contudo, o bloqueio pupilar relativo, ou exclusão funcional da pupila, ou resistência anormal ao fluxo das camaras anterior ou posterior.

O quadro clínico do glaucoma congestivo agudo é bem conhecido. A presença de células na camara anterior é freqüentemente notada e sinéquias posteriores são raramente notadas na crise congestiva aguda. Contudo, a câmara anterior em geral não se apresenta rasa ou de ângulo agudo em casos de irite aguda. A perda de pigmento da iris em trechos, num olho com câmara rasa é um sinal confirmatório de ataques agudos anteriores.

O glaucoma de ângulo agudo crônico algumas vêzes se confunde fàcilmente com o glaucoma de ângulo obtuso. As flutuações na tensão e a tensão inicial são muito

maiores em casos de glaucoma de ângulo agudo. Estudos gonioscópicos são de considerável valôr nessa diderenciação; durante o aumento de tensão, uma boa parte do ângulo se apresenta fechada em casos de glaucoma de ângulo obtuso, ao passo que no glaucoma de ângulo obtuso o ângulo fica sempre aberto, mesmo comtensão aumentada. Estudos tonográficos são de grande valôr.

A iridectomia periférica é recomendada como tratamento cirúrgico do glaucoma agudo quando a tensão é levada aos limites normais pelo tratamento clínico. Paraos casos em que a tensão é insuficientemente controlada por mióticos é predonizada a iridenclise ou iridenclise com retalho esclerótico. Chandler tem feito uma iridectomia basal modificada em tais casos.

O tratamento do glaucoma de ângulo agudo crônico é discutido. As sinéquias periféricas anteriores devem ser evitadas ou desfeitas pela indução ocasional de miose intensa. O tratamento cirúrgico dependerá em grande extensão da idade do paciente e da fase da moléstia. Os mióticos terão uma eficácia aumentada após a iridectomia periférica nas fases limitrofes da moléstia; contudo, se a fecção estiver adiantada, com extensas sinéquias periféricas anteriores, uma operação tal como a iridoclise ou preferentemente esclerotomia com retalho anterior e com iridoclise basal é aconselhada.

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Some Effects of the Vertically-Acting Muscles on Horizontal Ocular Deviation

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IT IS WELL known that there is a high incidence of vertical component in horizontal strabismus. It is also becoming more fully appreciated that poor postoperative results in treatment of the lateral deviation are often due to the neglected vertical element.

The vertical imbalance may be of two types: primary, or that which causes the horizontal deviation, and secondary, or that consequent to the horizontal deviation. Both types occur in convergent as well as divergent strabismus. Possibly the vertical element associated with convergent strabismus is more frequently secondary, while that observed with the divergent type is largely primary. The primary vertical deviation, however, undoubtedly occurs far more frequently than is generally realized. Most primary and many secondary vertical deviations are of paralytic origin. The deviation, of course, is nonconcomitant. Hence the diagnosis of a vertical component in the horizontal squint leaves no other therapeutic choice than surgical intervention.

The vertically-acting muscles, that is, the superior and inferior recti and the two oblique muscles, are so called because they are generally regarded as acting in the vertical planes, in contrast to the lateral and medial recti, which are purely horizontally-acting muscles. The fact that these so-called vertically-acting muscles have subsidiary actions other than in the vertical is often forgotten. Also, the fact that the oblique muscles are primarily torters, and act only secondarily as elevators or depressors, is seldom mentioned in the literature. Likewise, all four vertically-acting muscles have a horizontal component that undoubtedly plays a definite role in augmenting or diminishing the horizontal element of convergent or divergent strabismus.

Although the primary and subsidiary actions of the various ocular muscles are probably quite evident, some of these are not too widely understood. For this reason it might be well to review the actions of the muscles and to consider the pathologic effects they can produce in the presence of either convergent or divergent strabismus, together with the effects that might be expected to follow some surgical procedures.

This discussion is limited to the anatomic or mechanical effect of muscular action, whether normal or pathologic, and no consideration will be given to the accommodative, fusional or neurogenic aspects of strabismus.

Accepted Normal Action of the Ocular Muscles.—The thesis of Duane[1] depicts comprehensively the action of the muscles in the entire field of fixation. He has pointed out the maximum elevation and depression action obtained in various directions of gaze, the amount of torsion and the amount of external and internal rotations. From this a number of facts are to be predicted. The vertical action of the superior and inferior recti is nil

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at the limit of adduction, and this action increases progressively as the eye turns outward and becomes maximum with marked abduction. In the case of the oblique muscles the converse is depicted; that is, their elevating and depressing action is nil in marked abduction and increases to a maximum in marked adduction. The lateral action produced by these muscles is inversely related to their vertical actions; that is, in adduction the superior and inferior recti merely adduct the eye and have no vertical effect, while in abduction they function in a vertical direction exclusively. Also, in abduction the oblique muscles have no vertical action, but in adduction they act only as elevators and depressors. Moreover, the vertical action of the superior and inferior recti is maximum at the extreme limit of abduction, and the elevating and depressing effect of the oblique muscles is maximum at the extreme limit of adduction. Other points brought out by the diagram need not be mentioned at this time.

It is my opinion that Duane probably conceived the action of the muscles on a theoretical basis rather than on the basis of any clinical or anatomic measurements. The symmetry of performance in many respects is not in keeping with the anatomic variations observed in the planes of action of the vertically-acting muscles. It seems logical to doubt the correctness of this concept of muscle action. It has been suggested that the vertical action of the superior and inferior rectus muscles is equal to that of the corresponding oblique muscles. This is a manifest error when compared with the observations of Tschermak[2] on the vertical, torsional and horizontal action of these same muscles. It would also seem logical to assume that the maximum vertical action of the superior and inferior rectus muscles occurs at about 23 to 27 degrees of abduction, that is, before maximum external rotation of the globe has been reached. Some of these effects will be alluded to later.

Effects of the Vertically-Acting Recti.— Lateral movements of the globe are produced largely by the horizontally-acting recti. The effectiveness of these muscles in horizontal action is quite evident in the presence of paralysis of either the medial or the lateral rectus. In both of these paralytic conditions almost a complete loss of movement is encountered in the field of normal action of the respective horizontally-acting muscle. In the case of paralysis of the medial rectus the eye deviates outward, largely owing to the unopposed action of the antagonistic lateral rectus. When an attempt is made to adduct the eye, the lateral rectus relaxes, owing to reciprocal innervation, and the eye can be brought to the midline. Not infrequently it is possible to adduct the eye to some extent. This inward rotation of the globe in the presence of complete paralysis of the medial rectus is undoubtedly due to the well-known subsidiary horizontal action of the vertically-acting recti. Both the superior and inferior recti are adductors, and in the event that they contract equally and simultaneously their vertical and torsional components are neutralized, but the horizontal component of each is effective in bringing the eye inward beyond the midline.

Moreover, Volkmann,[3] Maddox[4] and others have shown by mathematical computations that the medial rectus, because of its limited arc of contact (about 7 mm.) is capable of rotating the eye inward only approximately 35 degrees. More recently, Gordon[5] has proved this clinically in cases in which the superior and inferior recti were both tenotomized, leaving only the medial rectus as the internal rotator. He further showed that when the vertically-acting recti were reattached, even at a site more posterior than their usual inser-

tions, adduction of more than 35 degrees was again possible.

Thus, there is no doubt that the superior and inferior recti, in addition to their vertical actions, have internal rotating components. Of course, this is evident from the fact that the direction of action of the muscles is in the vicinity of 23 to 27 degrees with the anterior-posterior axis of the globe. It is also evident that this internal rotating power of these muscles increases as the eye is rotated inward. This subsidiary action of the vertical recti is well recognized and generally accepted.

It follows, therefore, that the simultaneous action of both vertical recti can produce a convergent horizontal deviation. Also, it is evident that in the presence of an already existing convergent squint, the action of the vertical recti can augment this deviation. The greater the squint, the more the vertical recti are in a position to act as internal rotators. Likewise, the action of either the superior or inferior rectus singly in a convergent deviation, besides producing a vertical and a torsional effect, will augment the inward deviation. It is thought by some that, because the superior rectus is inserted slightly further from the limbus than the inferior, the overaction of the former might produce greater torsional effect than the latter, but the horizontal or inward rotating effect of each is approximately the same.

The converse is true also, in that when an outward deviation of the globe exists, overaction of either or both of the vertically-acting muscles would tend to diminish the divergent effect, at least if it is less than 27 degrees.

The reverse is also true in that a paretic or underacting vertical rectus in the presence of a convergent squint might be expected to diminish inward deviation, or minimize it, while the same disturbance would permit a divergent strabismus to be increased.

When a vertical element exists, therefore, in the presence of a horizontal deviation, and this is due to a vertical rectus, operation on either of these muscles will have a beneficial or disadvantageous effect, as the case may be, on the lateral deviation. In an esodeviation, resection of a vertical rectus will augment the horizontal deviation, while a recession will increase the same effect. In an exodeviation, resection of either of the vertical recti will diminish, and a recession will increase, the outward deviation.

It might also be interesting to recall that the inward rotating effect of the combined action of the vertical recti is the basis for the tendon transplant operation for medial rectus palsy. Here the inward rotating components of the vertical muscles are supposedly increased by transplanting slips from each tendon medial to their normal insertions, thus increasing their internally-rotating power. Whether this is actually accomplished is debatable, since some maintain that the beneficial effects obtained are due largely to the promotion of adhesions on the medial aspect of the globe. This, however, does not alter the rationale of the surgical procedure.

In contrast to the generally accepted statements that the vertical recti are maximum elevators or depressors in outward rotation, it is my opinion that when the globe is externally rotated about 23 to 27 degrees the vertical recti are contracting in the same plane as the visual axis. In this position they are thought to be pure elevators or depressors with no horizontal or torsional action. If this is true, and it has been demonstrated mathematically,[6] then it might be expected that the vertical action of these muscles would diminish somewhat as the globe rotates outward beyond 27 degrees and that, in addition to a torsional effect for each

muscle an abducting subsidiary action would develop. This change in the subsidiary actions of the vertically-acting muscles is seldom mentioned in the texts but has been brought out by Verrijp[7] and Ven de Hoeve.[8]

In a divergent strabismus of more than 27 degrees, therefore, an overacting superior or inferior rectus might be expected to augment the lateral deviation, while underaction of either of these vertical muscles would minimize divergent deviation. Again, a divergent deviation of more than 27 degrees with an overacting superior or inferior rectus would have the outward deviation diminished if either muscle were receded, and the same outward deviation would be increased if an underacting vertical rectus were resected.

The outward or lateral subsidiary action of the vertical recti, which is so seldom mentioned as a factor in divergent strabismus, is thought by many to be the basis for the Hummelsheim operation for external rectus palsy. In all probability, however, this procedure of tendon transplantation is more effective in diminishing the *add*ucting power of the vertical recti, than increasing their *abd*ucting ability. The cicatrix that forms, together with the horizontal actions of the obliques (to be mentioned later) is responsible for the improved abducting power obtained.

Another mechanical effect produced by the vertically-acting recti on horizontal deviation is to be merely mentioned in passing. This is the unexpectedly increased or decreased horizontal effect obtained when a vertical rectus is detached for any reason and not reattached in its original plane of action.

Effects of the Oblique Muscles.—There are many similarities in the two vertical recti. They arise practically from the same origin at the optic foramen and are of about the same length. They both insert on the globe in the midline, and each makes the same angle of 27 degrees with the visual axis. The oblique muscles, in contrast, are highly dissimilar.[9] Although the inferior oblique has a fairly constant point of insertion, the tendinous insertion of the superior oblique is quite variable. The inferior oblique makes an angle of about 51 degrees with the anterior-posterior axis, while the superior oblique makes an angle of about 54 degrees, according to the anatomic data of Volkmann[3]; but the most recent studies of Fink[10] show that the directions of pull of the obliques are not at all similar—and they show marked and wide variation. The superior oblique has a very short arc of contact, while the inferior oblique has an extremely long one. The superior oblique is inserted superiorly near the midline, and a portion of the insertion is actually anterior to the equator, whereas the inferior oblique is inserted posteriorly and laterally just beneath the belly of the external rectus. For these reasons the mechanical action of the obliques can hardly be expected to be similar and symmetric as indicated in the work of Duane.[1] Moreover, the superior oblique tendon passes beneath the superior rectus, but the two are separated by the fascia bulbi. The inferior oblique, on the other hand, passes beneath the inferior rectus, and between the two muscles there is a fusion of their fascial sheaths into the ligament of Lockwood. This fusion is of variable degree. According to Fink,[11] some specimens show a very firm union, while many show long, delicate, loose bands that permit considerable independent motion of either muscle. This element of fusion between the muscles, together with their check ligaments, which also are highly variable, undoubtedly has some unpredictable effects on the expected mechanical action of the oblique muscles.

Normally, when the eye is in the primary position the superior oblique is primarily an intorter, while depression and

external rotation are subsidiary actions. As the eye deviates outward, the primary function of torsion and the subsidiary action of the external rotation increase, and at the same time the action of depression decreases. In adduction the primary function changes to depression, since most of the muscle's energy goes into this action, and torsion becomes very much less. The subsidiary lateral action, theoretically, should change to internal rotation when one considers the plane connecting the trochlea or effective origin with the scleral insertion. From a practical standpoint, however, the tendon probably deviates mesially somewhat owing to encroachment of the insertion of the superior rectus under which it passes, and so the lateral action in this position is probably of little consequence.

In the presence of convergent strabismus with a vertical element due to overaction or underaction of the superior oblique, this muscle will probably have little direct mechanical effect on the lateral deviation, for here it is acting almost wholly as a depressor. Likewise, in this situation, operation on the tendon, while producing a marked effect in the vertical, will produce little if any change in the convergent deviation. In contrast, however, in the presence of divergent strabismus with an overacting superior oblique, the outward deviation will be augmented by the overaction. And, if divergent strabismus is present with underaction of the superior oblique, the outward deviation will be lessened because of the weakness of this vertical component. In operating on the superior oblique tendon, therefore, in the presence of divergent strabismus, tucking or advancement of the tendon would be expected to augment the outward deviation, while recession or tendectomy would have a minimizing effect on the same divergent deviation.

The normal action of the inferior oblique has become somewhat controversial in recent years. This is due possibly to the application of a vector analysis (Krewson[6]) in the mathematical study of ocular muscle actions, and also to deduction following some unexpected results from operation on this muscle.

The inferior oblique muscle is generally regarded as having extorsion for its primary function; elevation and external rotation or abduction are considered subsidiary functions. The elevation is thought to be at a maximum and extorsion and external rotation at a minimum when the globe is internally rotated or adducted. In this position the pull of the muscle is supposed to be more or less parallel to the anterior-posterior diameter of the globe. Elevation is thought to be at a minimum and extorsion and external rotation at a maximum when the globe is turned outward or abducted, in which position the muscle is supposed to be at right angles to the anterior-posterior diameter of the globe. These positions of the inferior oblique muscle with relation to the rotations of the globe are not in conformity with the anatomic data developed by Volkmann[3] and more recently by Fink.[11] There is little doubt that when the eye is abducted the muscle plane passes posterior to the vertical axis or center of rotation and the muscle acts as an abductor. When the globe is in the primary position, the muscle passes close to or actually anterior to the center of rotation, and under these circumstances the muscle would be expected to have little in the way of horizontal action, but if any existed, this would tend toward adduction. As the eye is rotated inward the muscle plane would pass anterior to the center of rotation, and its horizontal action would be expected to be that of an adductor, which increases as the eye continues to turn inward.

There is no doubt that the horizontal

action of the inferior oblique muscle would be modified greatly by the cheek ligaments and by the fascial attachment between the inferior oblique and the inferior rectus muscles. These anatomic restrictions are highly variable, and they also contribute to the unexplained actions sometimes exhibited by this muscle. If the fascial attachments are sufficiently loose to permit much excursion between the inferior group of muscles, the horizontal action of the inferior oblique would be expected to act in two directions. That is, when the eye is internally rotated, the muscle functions as an internal rotator or adductor, and this function increases as the eye is turned in still further. And, when the eye is externally rotated, the muscle functions as an external rotator or abductor, and this function becomes greater as the eye continues to turn outward. This statement of the subsidiary action of the inferior oblique muscle differs from that generally accepted and depicted by Duane.[1]

The fact that the inferior oblique muscle has a horizontal action can be especially important in cases of strabismus combining a vertical and horizontal element. This is true since the inferior oblique is possibly the most frequently involved in this fashion.

An overacting inferior oblique, therefore, in the presence of a convergent squint would be expected to increase the inward deviation, while overaction of the same muscle in the presence of a divergent squint would accentuate the abduction or outward deviation. Likewise, a paralytic or underacting inferior oblique in the presence of an inward deviation would minimize the convergent tendency, and an underacting inferior oblique in the presence of divergent strabismus would tend to decrease the outward deviation.

Surgical therapy thus can have a predictable effect on horizontal squint when applied to an accompanying vertical disturbance of the inferior oblique muscle, regardless of whether this vertical component is related primarily or secondarily to the horizontal squint. Recession or myectomy of an overacting inferior oblique in the presence of a convergent squint would diminish the inward deviation; likewise, the same operation applied in a case of divergent squint would diminish the outward deviation. Also, resection, advancement or tucking of a weakened inferior oblique in the presence of a convergent squint would probably increase the horizontal inward deviation, and any strengthening operation applied to a weakened inferior oblique in the presence of divergent strabismus might increase the outward deviation.

In passing, one other effect of the inferior oblique on horizontal deviation might be included. This is the adherence syndrome, recently mentioned by Johnson.[13] In this condition the clinical picture is one of lateral rectus paralysis due to abnormal strength of the usual or physiologic loose attachment between the insertion of the inferior oblique muscle and the fibers of the lateral rectus. This abnormality decreases or eliminates entirely the arc of contact of the lateral rectus and materially inhibits its abducting power.

CONCLUSIONS

Both convergent and divergent strabismus combined with vertical muscle imbalance are observed frequently. The vertical deviation may be either the primary cause of the horizontal disturbance or secondary to it.

The so-called vertically-acting muscles have subsidiary actions in the horizontal directions, both abduction and adduction. While these lateral effects of the vertical muscles have long been recognized, their effects are often overlooked in evaluating cases and planning surgical intervention.

These muscles not only effect a vertical deviation but can augment or diminish already existing lateral strabismus. When these complicating factors are not taken into account, disappointing results and surgical failures may be encountered unexpectedly.

RÉSUMÉ

On observe fréquement à la fois du stabisme convergent et divergent liés à un déséquilibre du muscle vertical. La déviation verticale peut être soit la cause primaire d'un trouble horizontal, soit secondaire à lui.

Les muscles soit-disant à action verticale ont des effets subsidiares dans la direction horizontale: abduction et adduction. Tandis que ces effets latéraux des muscles verticaux ont été reconnus depuis longtemps, ils sont souvent négligés dans l'évaluation des cas et l'établissement du plan de l'intervention chirurgicale. Ces muscles non seulement produisent une déviation verticale, mais aussi peuvent augmenter ou diminuer le strabisme latéral déjà existant. Quand ces facteurs de complication sont négligés, on peut rencontrer d'une façon inattendue des resultats désappointants et des échecs chirurgicaux.

RESUMEN

Ambas formas de extravismo, convergente y divergente, combindas con desequilibrio muscular vertical son de observación frecuente. La desviación vertical puede ser de causa primaria o secundaria a una perturbación horizontal.

Los llamados músculos de acción vertical tienen acciones también en dirección horizontal, adducción y abducción. Los efectos laterales de los músculos verticales se conocen desde hace mucho, pero sus efectos son desapercibidos en la valorización de los casos para intervención quirúrgica. Estos músculos no únicamente efectúan una desviación vertical, sinó que pueden aumentar o disminuír un extravismo lateral ya existente. Cuando estos factores no se toman en cuenta se encuentra inesperadamente resultados insatisfactorios y fracasos quirúrgicos.

RIASSUNTO

Frequentemente si osserva che sia lo strabismo convergente che quello divergente si associano ad uno squilibrio dei muscoli oculari ad azione verticale. La deviazione dell'occhio sul piano verticale può essere causa o effetto della deviazione sul piano orizzontale.

I cosidetti muscoli ad azione verticale esplicano influenze sussidiarie anche sul piano orizzontale, sia nei riguardi dell'adduzione che in quelli dell'abduzione. Per quanto, però, tali influenze siano note da tempo, i loro effetti sono stati da tempo trascurati sia nella valutazione diagnostica che nella pianificazione terapeutica dei casi di strabismo. Tali muscoli non solo producono deviazione degli ochhi in un piano verticale, ma possono aumentare o diminuire uno strabismo laterale preesistente. Sicchè, quando tali fatti non vengano tenuti in debito conto la cura chirurgica dello strabismo può dare cattivi risultati o anche fallire del tutto.

SUMARIO

O estrabismo convergente e o divergente, combinados com desequilíbrio muscular vertical, são freqüentemente vistos. O deavio vertical pode ser a causa primária da perturbação horizontal ou secundário à mesma.

Os assim chamados músculos de ação vertical tem ações subsidiárias na direção horizontal, tanto abdução como adução. Embora êsses efeitos laterais dos músculos verticais tenham há muito sido reconhecidos, seus efeitos freqüentemente não

são considerados ao se avaliar os casos e planejar a intervenção cirúrgica. Esses músculos não apenas efetuam um desvio vertical como podem aumentar ou diminuir o estrabismo lateral já existente. Quando êsses fatores de complicação não são levados em devida consideração, podem ser encontrados inesperadamente resultados desanimadores e falhas cirúrgicas.

ZUSAMMENFASSUNG

Sowohl konvergierendes als auch divergierendes Schielen in Verbindung mit vertikaler Instabilität der Muskeln wird häufig beobachtet. Die vertikale Abweichung kann entweder die primäre Ursache des horizontalen Schielens oder dessen Folge sein.

Die sogenannten vertikal wirkenden Muskeln unterstützen die Bewegungen in horizontaler Richtung, sowohl Abduktion als auch Adduktion. Diese seitlichen Einflüsse der Vertikalmuskeln sind zwar seit langem bekannt, ihre Bedeutung wird aber bei der Beurteilung der Fälle und bei der Ausarbeitung des Planes für einen chirurgischen Eingriff oft übersehen. Diese Muskeln rufen nicht nur eine vertikale Abweichung hervor, sondern können auch einen verstärkenden oder mildernden Einfluss auf einen bereits bestehenden seitlichen Strabismus ausüben. Die Vernachlässigung dieser komplizierenden Faktoren kann zu unerwarteten und enttäuschenden Resultaten und zum Versagen des chirurgischen Eingriffs führen.

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Evil is necessary. If it did not exist, the good would not exist. Evil is the unique reason for the good's being. What would courage be far from peril? and what pity without pain? What would become of devotion and sacrifice if happiness were universal? It is because of evil and suffering that the earth may be inhabited and that life is worth living. Do not complain of the devil. He is a great artist and very learned. For every vice that you destroy there was a corresponding virtue that perished with it.

—*Anatole France*

Clinical Observations on Cataract and Glaucoma in the Same Eye

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OPHTHALMOLOGISTS are largely interested in the clinical aspects of the practice of medicine and surgery—bringing the best treatment to the ill patient. I have therefore selected a subject, or perhaps a subject-complex, of purely clinical significance, and I shall present it from the viewpoint of a practicing ophthalmologist of more than thirty years' experience. I shall not attempt a formal, statistical presentation, nor shall I review the literature exhaustively, or bring up matters involving theories or laboratory research.

I should like to begin rather simply with an account of my own father's eye trouble. He practiced general medicine in Long Island City from 1890 to 1945, doing all his own major operations as well as obstetrics, intubations, etc. He was a coroner's physician and a surgeon in the New York Fire Department. When he was a medical student at New York University in the 1880's, the other students in the ophthalmoscopy class reported that he had an incipient cortical cataract in one eye. He had done boxing in his teens and thought it might have been due to that.

During my early years in medicine, when he was about 57, this cataract matured. I remember seeing him instilling into this eye some drops of a patent medicine called "Succus Cineraria Maritima," which was probably no worse and no better than the mercuric cyanide injections of a later date, or the dionin drops I myself have often prescribed. He was seen by various first-rank ophthalmologists of the day, including Giles and Edgar Thomson. They advised no surgical intervention, because the other eye had vision of 20/20 and no signs of cataract.

During my father's seventieth year, when the cataract had been mature for thirteen years, pain and lacrimation suddenly developed in this eye, and he discovered that the tension was elevated. I looked at the eye and found a chunk of cortex lying in the bottom of the anterior chamber and a portion of the pupillary of the lens obviously missing. He was seen by Arnold Knapp and David Webster. Iridectomy was performed, but without relief. The eye eventually was enucleated. He lived more than twenty years afterward, continuing in practice, including surgery, driving his car, for twelve of those years, and neither a cataract nor a glaucoma ever developed in the other eye.

Von Szily[1] in 1884 first reported a case of "spontaneous rupture of the lens capsule," and H. C. Knapp,[2] reporting a case of spontaneous rupture of the lens capsule in hypermature cataract causing secondary glaucoma, noted the paucity of such cases in the literature. In his case, swollen cortical matter protruded through the aperture in the lens capsule until it was in contact with the cornea. The resulting glaucoma was entirely relieved by removing the lens nucleus and débris from the anterior chamber. Knapp expressed the opinion that the rise in tension was due both to mechanical blocking of the angle

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by the pressure of the swollen lens from behind and by the lens matter locally, and to irritation of the ciliary body as part of a phakoanaphylactic reaction.

In cases of glaucoma capsulare there is a somewhat different situation. There is desquamation of the anterior lens capsule, with no obvious holes. Flakes of epithelial tissue gather on the pupillary area of the capsule and in a ring near the zonular attachments, as well as on the zonular fibers themselves. Some of these flakes drop to the bottom of the chamber, and, accumulating in the angle, may block it sufficiently to cause secondary glaucoma. Lens extraction cures the glaucoma in these cases unless irreversible changes have occurred in the filtration angle.

In cases of hypermature or Morgagnian cataract, secondary glaucoma may appear without the presence of either of the foregoing conditions. It is assumed that dislocation of the shrunken nucleus within the capsule may cause pressure on the ciliary processes and irritation of the ciliary body. If these cataracts are not removed promptly, absolute glaucoma may result, making necessary the enucleation of a sightless, painful eye.

My father's tragic case, observed early in my career, made me alert to the dangers of hypermature lenses; on at least two other occasions I have had to remove eyes for this type of glaucoma in patients who, years before (in 1 case thirteen years and in the other seventeen) had undergone cataract extraction in one eye and, being of advanced age, had decided against having this fellow cataract removed. They lived beyond their expectations; the lenses became hypermature, and glaucoma developed. These eyes all undoubtedly would have been saved had extractions been performed within a few years after the cataracts had bcome mature.

There are other cases, not so obvious, in which increased tension appears in eyes that have immature cataracts. In many such cases the condition is controlled by regular use of miotics. Sometimes the patients are operated upon for glaucoma, after which one sees the familiar picture of cataract, formerly slowly progressive, rapidly becoming mature. Often the glaucoma operation does not relieve the tension, and miotics must be continued. If, now, the cataract is removed in the capsule, one may find that the glaucoma is completely cured—striking evidence that the swelling of the cataractous lens was the primary factor in production of the glaucoma.

Bearing in mind the fact that eyes operated upon for glaucoma frequently require operation for cataract later, what type of glaucoma operation should one perform? Before attempting to answer this question, one should ask oneself whether cataract will necessarily develop in all eyes that have been operated on for glaucoma. In my opinion, the cataracts that develop after glaucoma operations would have developed in any case, although probably not as soon.

Cataract has not developed in the younger patients I have operated upon for glaucoma. In 1951[3] I reported the case of a family in which twelve eyes in two generations were operated upon for glaucoma at ages ranging from 19 to 45. In no instance has cataract developed, although periods of twenty-six, twenty-two and fourteen years, respectively, have passed for four of these pairs of eyes.

Persons with congenital glaucoma, if the condition is arrested by operation in infancy, rarely acquire cataracts, although useful vision may be lost owing to complications. In all cases of juvenile and presenile glaucoma I have performed trephinings, and I still consider the Ellis trephining the operation of choice for glaucoma in patients under 45 years of age, especially Caucasians. In Negroes, per-

haps, iridencleisis gives better results. It is argued that an eye which has been trephined is more liable to deep infection than before, and certainly the patient should, for the rest of his life, use germicidal drops daily. Before antibiotics came into use, one of my patients lost an eye which had been trephined. On section, however, this eye did not present true panophthalmitis but merely a film of exudate behind the lens; such an eye today could probably be saved.

If a patient requiring surgical intervention for glaucoma obviously has a developing cataract, I perform deep iridectomy; if the tension is not adequately controlled, I then proceed with the cataract extraction as soon as the eye is quiet. If the association with the cataract is less apparent, I do one of the filtering operations as previously suggested; such a procedure is more apt to control the tension. If the lens is becoming opaque and swollen, however, it may still be necessary to use miotics; it is in such cases that the best results seem to have been obtained after cataract extraction, the tension subsequently staying down without further use of miotics.

The technic of cataract extraction after a filtering operation for glaucoma requires some comment. Extraction *in the capsule* is of prime importance. The postoperative presence of capsular shreds and a small amount of cortex is to be dreaded, more because of possible phakoanaphylactic reaction than because of the risk of losing a small amount of vitreous. I know that many surgeons feel great apprehension about disturbing the filtering bleb and therefore do their extractions through a lateral or inferior incision. To my mind this is entirely unnecessary. I make a Graefe section above, coming out at the limbus or in the cornea as the situation demands, and remaining in front of the iris and below the bleb. I then place appositional sutures of mild chromic catgut, enlarge the section with scissors if necessary, slip an iris repositor between the iris and the anterior lens capsule to separate the adhesions that are usually present, complete the iridectomy if it is a peripheral one, and then extract the lens in capsule. The capsule is usually tough and the zonule weak, as in the case of all complicated cataracts, and these operations, far from being difficult, are really quite easy. Atropine should be instilled, and I like to leave a bubble of air to deepen the anterior chamber, which has probably been rather shallow for some time. Healing is usually entirely uneventful. I can cite numerous cases from my private practice in which this procedure, in patients who had previously lost the sight of the other eye owing to glaucoma, resulted not only in retention of useful vision but in complete arrest of the glaucoma.

Leaving these happy patients, one passes to a group every surgeon dreads—those in whom glaucoma develops as a primary complication after an operation for cataract. What shall be done for them?

Sometimes the answer is obvious. If there is adhesion of the iris to the cornea, if the anterior chamber has not reformed, or if the vitreous is in contact with the cornea, it may be necessary to make a small keratome incision under a conjunctival flap, to separate the adhesion of the iris or vitreous to the cornea with a blunt or sharp instrument and to distend the anterior chamber with air. A cyst of the iris may require surgical, chemical or electrical treatment. An epithelial downgrowth may call for irradiation. If these procedures do not serve to keep the tension down, or if there is no apparent mechanical explanation for the glaucoma, miotics may be tried; in such cases Floropoyl (D.F.P.), in my experience, is the drug of choice.

I also find diamox an invaluable drug

in all cases of complicated glaucoma. One 250 mg. tablet, administered three or four times daily at first, can be counted on almost invariably to bring the tension down to normal within forty-eight to seventy-two hours. This medication acts by eliminating sodium from the system, and the result corroborates the long-held theory that intraocular tension may be reduced by hypertonic infusions and subconjunctival injections. It does not seem rational, however, to administer indefinitely a drug that has such a pronounced systemic effect, and for that reason it should be employed only (a) as a preliminary to operations or (b) for a patient in whom the exciting cause of the secondary glaucoma may be expected to subside within a reasonable time, so that the drug may then be discontinued.

For the glaucoma complicating cataract the last resort is operation, and here one has several alternatives. This is the only condition for which I ever perform a cyclodialysis; it is sometimes effective, but the results are not always lasting. The same may be said of cyclodiathermy or cycloelectrolysis—they are easy to perform; they involve little fuss or bother; the immediate results are good, but the effect is not always permanent. My personal preference in operating for glaucoma in aphakic eyes is the trephining operation, done a little way from the surgical coloboma of the iris, with a new peripheral iridectomy. An aphakic eye is usually not the site of anterior uveitis; the rise in tension is due to blocking of the iris angle, and the trephining operation is based on correct mechanical principles for giving relief.

When all is said and done, it must be acknowledged that the surgeons who perform the most meticulous operations encounter glaucoma least frequently after their uncomplicated cataract extractions. The best treatment for this dreaded complication is prevention. If a cataract is extracted in the capsule without undue loss of vitreous; if one is attentive to the toilet of the wound, leaving no incarcerated iris; if the conjunctival flap prevents epithelial downgrowth; if the sutures seal the wound, and if the anterior chamber is deepened with air or saline solution, postoperative complications of all kinds will be fewer.

SUMMARY

The author discusses the relation between cataract and glaucoma, pointing out that in cases of hypermature or Morganian cataract, if the cataract is not corrected promptly, absolute glaucoma may result.

RÉSUMÉ

L'auteur discute la relation entre cataracte et glaucome, signalant que, si la cataracte n'est pas promptement corrigée en cas de cataracte en hypermaturité ou Morganienne, un glaucome absolu peut en résulter.

RIASSUNTO

L'autore discute le relazioni che intercorrono fra cataratta e glaucoma, mettendo in particolare evidenza la possibilità che, se non si operino prontamente cataratte di vecchia data, possa svilupparsi un glaucoma.

ZUSAMMENFASSUNG

Der Verfasser erötert die Beziehungen zwischen Katarakt und Glaukom und weist darauf hin, dass es in Fällen von überreifem oder Morgagnischem Katarakt zu einem absoluten Glaukom kommen kann, wenn der Katarakt nicht sofort behandelt wird.

SUMARIO

O autor discute a relação entre catarata e glaucoma, salientando que em casos de catarata morganiana, se esta não for corrigida prontamente, pode resultar glaucoma absoluto.

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Before Galileo it was held that there was a radical difference between regions below the moon and regions from the moon upwards. In the regions below the moon, the "sublunary" sphere, there was change and decay; the "natural" motion of bodies was rectilinear, but any body in motion, if left to itself, would gradually slow up and presently stop. From the moon upwards, on the contrary, the "natural" motion of bodies was circular, or compounded of circular motions, and in the heavens there was no such thing as change or decay, except the periodic changes of the orbits of the heavenly bodies. The movements of the heavenly bodies were not spontaneous, but were passed on to them from the *primum mobile*, which was the outermost of the moving spheres, and itself derived its motion from the Unmoved Mover, i.e., God. No one thought of making any appeal to observation; for instance, it was held that a projectile will first move horizontally for a while, and then suddenly begin to fall vertically, although it might have been supposed that anybody watching a fountain could have seen that the drops move in curves. Comets, since they appear and disappear, had to be supposed to be between the earth and the moon, for if they had been above the moon they would have had to be indestructible. It is evident that out of such a jumble nothing could be developed. Galileo unified the principles of governing the earth and the heavens by his single law of inertia, according to which a body, once in motion, will not stop of itself, but will move with a constant velocity in a straight line whether it is on earth or in one of the celestial spheres.

—*Russell*

Evisceration and Intrascleral Gold Ball Implant

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EVER since the introduction in 1885 of Mules' operation, which consisted of the insertion of a hollow glass ball into the sclera after an evisceration, and Frost's procedure, in the same year, of introducing a sphere into Tenon's capsule after enucleation, the ophthalmic world has been searching for a better procedure and a more suitable implant when an evisceration or an enucleation has been performed. These two procedures were the forerunners of the present-day buried and unburied implants.

The Mules' operation was quite popular for a time, but its many disadvantages and failures caused ophthalmologists to discard it. The same was true in part of the Frost operation. As a result, there has been a veritable parade of different types of implants, both buried and intergrated, advanced by many excellent ophthalmic surgeons. Each presented some outstanding advantage over the others, but none has been adopted universally as the ideal replacement when an eye must be removed.

Many of the more recently proposed implants must be introduced into Tenon's capsule, there to be fixed by sutures and the subsequent attachment of the four straight recti muscles by one means or another to the implant. In my own opinion, no type of Tenon's capsule implant can provide as good a motility of any applied prosthesis as does an intrascleral implant, in which the six extraocular muscles are left intact to function as they normally do.

From time to time, for one reason or another, ophthalmic surgeons are called upon to remove an eye by enucleation or evisceration. They are therefore always interested in finding the ideal implant to replace the removed eye. One must always keep in mind that the near-perfect implant must have at least four outstanding qualifications:

1. It must not migrate in the orbit.
2. It must restore the shape of the eyeball.
3. It must restore the volume of the lost eye.
4. It must provide motility of the prosthesis in all cardinal fields as nearly in perfect imitation of the natural eye as possible.

A. N. Lemonie, in a brochure on one manufacturer's implant, stated: "It is to be hoped that its use will overcome three disadvantages of the usual ball type implant (inserted in Tenon's capsule) by assuring (1) retention of a deep socket; (2) better motility, and (3) prevention of implant migration. He said further that only time will supply the answer to this problem. "It is hoped," he stated, "that Tenon's capsule and the muscles will adhere to the tantalum mesh and thus prevent migration."

In the July, 1954, issue of the *American Journal of Ophthalmology*, Arruga, in an article entitled *An Improved Orbital Implant*, stated: "In the last few years, there have been many attempts to produce an implant which will assure good prosthetic motility, but most of these have failed for one reason or another."

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It would seem from the many implants advocated that there is a great dissatisfaction on the part of ophthalmic surgeons with the various implants thus far developed. Certainly this has been my experience, especially with implants introduced into Tenon's capsule. The initial results have shown that surprising motility *sometimes* has been obtained, but for one of several reasons this motility is not permanent.

My experience agrees with that of Stone, as reported in his paper, *Movable Postenucleation Implants,* read at the A.M.A. meeting in 1950: "Four main complications have been encountered in intergrated postenucleation implants. They are (1) secretion; (2) granulation tissue or polyps at the conjunctival edge; (3) exposure of mesh work, and (4) operative difficulties with secondary delayed implants."

D. P. Chayce of London, in a paper entitled *Orbital Implants* in the July 1953 issue of the *British Journal of Ophthalmology,* reviewed a series of 99 buried and intergrated implant operations done at Moorfields, Westminster, and central eye hospitals. In a survey of 98 per cent of these operations, 50 per cent of the hollow Tantalum implants came out during the first two years, and 40 per cent of the gold ring implants were extruded in the next two to three years. After five years he concluded that in all probability only 1 or 2 implants would remain buried. He further stated that infection was the dominant factor in producing such a high degree of extrusion of unburied implants. The conjunctiva is presumably never able to form a bacterium-proof juncture with the foreign body.

No doubt many ophthalmic surgeons have had a similar experience. I must confess my own has been the same, and I have been greatly disappointed in the end results. I have been looking and hoping for a better procedure to follow when I am obliged to take out an eye.

In 1939 Dr. Frank Burch presented a paper entitled *Evisceration with Scleral Implant with Retention of the Cornea* before the American Ophthalmological Society, and in the fall of the same year, at the Academy meeting, he presented a motion picture of this operation, which I was privileged to see. His procedure interested me very much, since it provided for a thorough evisceration of the eye with preservation of the cornea, implantation of a gold ball into the sclera, and avoiding interfering with the original insertion of any of the six extraocular muscles. To me the procedure made sense.

With this procedure, properly performed, one is assured of an implant that cannot migrate. It definitely restores the shape and volume of the eye, and volume is a most important factor. Finally, the intrascleral implant with the cornea preserved and the six extraocular muscles untouched provides the most perfect motility for any applied prosthesis that I have ever observed.

Since none of the extraocular muscles are displaced from the original insertion, it stands to reason that motility in all cardinal fields of gaze will be as nearly perfect after the operation as it can be made, providing an excellent reproduction of conditions as they existed before evisceration had been performed.

The more I have performed this operation the better I like it. At the time of writing I have performed it 27 times. I have never lost an implant by self-extrusion or for one or another reason had to be removed. I always use a hollow 14-carat gold ball. Apparently gold causes less irritation than does any other foreign substance.

I recommend two points in making this procedure successful:

1. Do not use too large an implant in

the sclera. (I rarely use a gold ball more than an 18 mm. in diameter. Only on a few occasions have I used a 20 mm. ball. Most frequently a 16 mm. to 18 mm. ball is used in adults and correspondingly smaller sizes in children.)

2. I favor many interrupted, closely applied No. 000 chromic catgut sutures. (I frequently use 20 or more sutures to close the sclera. This assures a watertight, sealed sclera and with it I have no fear, even with a moderately severe secondary reaction, of extrusion of the gold ball.)

The argument has been advanced that the secondary reaction following this type of procedure is more severe than after an enucleation with a Tenon's capsule implant. I fully agree with this observation, in a certain percentage of cases, but certainly it is not true in all cases. When chemosis is moderate to severe this can easily be controlled, as Burch has advocated, by vertical incision through the chemotic conjunctiva. With large doses of penicillin and antibiotics given preoperatively and postoperatively these postoperative complications can be kept to a minimum.

When I see the beautiful cosmetic end results of this procedure (*and they remain constant*), I have no hesitation in coping with the occasional severe postoperative reaction.

Some argue that a scleral implant predisposes the patient to sympathetic ophthalmia more readily than does an enucleation and a Tenon's capsule implant. I have not found this to be true. I have never had a case in which this postoperative complication developed. In 1 rather recent case I have observed a sympathetic irritation in the remaining eye, but this responded quickly to typhoid intravenous therapy and to antibiotics.

According to Duke Elder, the diagnosis of sympathetic ophthalmia is not always correct. He has stated that such implants, at most, cause a harmless sympathetic irritation.

In 1953, in the *British Journal of Ophthalmology*, W. Hedley Summerskill of England, in an article entitled, *Modification and Defence of Scleral Implants*, stated: "There is little to justify an assumption that a properly performed evisceration with or without scleral implant could initiate sympathetic ophthalmia. The literature to date has not produced any convincing evidence that scleral implantation causes sympathetic disease."

In the selection of proper cases for this type of operation it is wise to note that a scleral implant should *not* be used in eyes that must be removed as a prophylactic measure against sympathetic ophthalmitis. Again, the scleral implant should not be used in an injured sclera, since it will be most vulnerable to invading pathogenic organisms. It is also advisable not to put a scleral implant into an infected eye. Eviscerate and wait. At some subsequent time, when all evidence of infection has disappeared, a scleral implant may be considered. Certainly this procedure should not be performed if the pathologic condition of the eye requires study. Again, it should not be done when a diagnosis of the eye tumor has been made.

In support of evisceration, scleral implant and retention of the cornea as the ideal combination is an article by Berens and Rosa in the March 1953 issue of the *American Journal of Ophthalmology, Evisceration With Plastic Intrascleral Implants*. This is an excellent paper. The authors' technic differs from the Burch procedure in that (1) a plastic cylindric implant is used instead of a gold ball, and (2) they *do not preserve* the cornea but excise it.

Personally I favor the Burch operation, with preservation of the cornea, since it

restores the shape of the eyeball when the gold ball is introduced into the sclera, and by so doing it helps to restore the volume of the eye. And, as has been stated, volume is a most important factor. Ruedemann, in a discussion of Stone's paper, *Movable Postenucleation Implants*, at the American Medical Association meeting in 1950, stated: "The *volume* of the eyeball removed must be in the main replaced." Another interesting statement was made by Ruedemann in discussing Dr. Stone's paper: "A basic factor in this surgical operation is the position of the eye that is being removed or the eye that still remains. There is a known anterior posterior location of the eyes for every individual. This factor cannot be ignored, as the sulcus produced in the upper eyelid is due to position and volume."

In no operation for removal of the eye is this anterior-posterior location of the eye better retained than in a intrascleral implant. It practically restores the globe to its original size, shape and volume, as well as to its original position in the orbit. Ruedemann further stated: "After enucleation the anatomy and physiology of the orbit is different. The conjunctiva changes from a mucous membrane to a fibrous coat, which may, because of inaction secrete an unlimited amount of mucin."

Certainly in an evisceration with an intrascleral implant and preservation of the cornea and all the extraocular muscles intact the anatomic and physiologic relations remain about as constant and unchanged as they were before any operation was performed.

I fully agree with Berens and Rose, who stated: "Physiologically a patient more readily accepts the removal of the contents of the eyeball rather than the removal of the globe." This one point has "sold" this particular operation to all of my 27 patients. They like the idea that they will retain the eyeball, which will move about as well postoperatively as preoperatively, and that all I do is simply remove the contents of the globe that is diseased and introduce a gold ball to retain the shape and volume of the globe.

In a symposium on orbital implants at the Academy meeting in 1951, Cutler made the following statement: "It is possible that the use of the scleral implant with the muscle attachments *intact* has not been exploited enough in both the field of buried and non-buried implants. Certainly in the Burch and the Universal type the motility is excellent."

Weiner, in his second edition of *Surgery of the Eye*, stated: "Evisceration with retention of the cornea according to the method described by Burch is preferable to simple evisceration or the Mules operation or enucleation with implant providing there is no infection present, suspicion of an intraocular growth has been excluded, a pathologic specimen is not desired, or when the injured eye is not too severely damaged. It gives the very best socket for insertion of an artificial eye and providing the operation is carefully done with removal of every vestige of uveal tissue the chances of sympathetic ophthalmia occurring is certainly not greater than after enucleation. In over 35 years' experience, Burch has never had it occur following this method."

SUMMARY

The author states that, when one weighs the many difficulties and postoperative problems encountered in the use of a Tenon capsule implant as described by Stone and many others, it would appear that an intrascleral implant, as in the Burch operation, which presents only a few negligible problems, is the ideal combination of operation and implant to be followed in most instances when an eyeball must be removed.

RÉSUMÉ

L'auteur établit que lorsqu'on pèse les nombreuses difficultées et problèmes post-opératoires rencontrés dans l'emploi d'un implant de capsule de Tenon selon Stone et plusieurs autres, il apparaîtrait qu'un implant intrascléral, selon l'opération de Burch qui ne présente que quelques difficultés négligeables, constitue la synthèse idéale de l'opération et de l'implantation à laquelle il faut se conformer dans la plupart des cas, lorsqu'on doit enlever le globe oculaire.

SUMARIO

O autor afirma que quando se pesa variados problemas pós-operatórios e dificuldades encontradas no uso de implantação capsular tendinosa, conforme descrito por Stone e outros, parece que uma implantação intra-esclerótica, como na operação de Burch, a qual apresentam apenas poucos problemas desprezíveis, constitui a combinação ideal de operação e implantação, a ser seguida na maioria dos casos em que se deve retirar um globo ocular.

ZUSAMMENFASSUNG

Angesichts der vielen Schwierigkeiten und postoperativen Probleme, die bei Anwendung der von Stone und vielen anderen beschriebenen Sehnenkapseltransplantation auftreten, hält der Verfasser die intrasklerale Goldkugeleinpflanzung wie bei der Burchschen Operation, die nur wenige, unbedeudente Probleme einschliesst, für eine ideale Kombination von Operation und Einpflanzung, die sich in den meisten Fällen, wo ein Augapfel entfernt werden muss, empfiehlt.

RIASSUNTO

Se si tiene conto delle difficoltà e dei problemi che si incontrano nell'eseguire l'impianto della capsula di Tenone secondo la tecnica descritta da Stone e da altri, si deve convenire che l'impianto intrasclerale, secondo Burch, che presenta solo difficoltà trascurabili, è un metodo ideale che si può seguire in molti casi di enucleazione del globo oculare.

RESUMEN

El autor establece que cuando uno estima las muchas dificultades y problemas postoperatorios encontrados en el uso de una implantación de cápsula de acuerdo con lo descrito por Stone y muchos otros, parece ser que una implantación intrascleral, compo la operación de Burch, presenta únicamente problemas sin importancia, siendo la combinación ideal de operación e implantación en la mayoría de los casos caundo debe extirparse un globo ocular.

I have never been able to conceive how any rational being could propose happiness to himself from the exercise of power over others.

—*Jefferson*

A Method for Correction of Blepharoptosis

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BLEPHAROPTOSIS is a rather common deformity and is frequently very disabling. Its causes are well known, and the methods designed for its correction are familiar to every surgeon interested in the problem. That none of these methods is perfectly satisfactory or universally applicable is obvious from their multiplicity. In a review published in 1945, Berke[1] counted more than eighty procedures.

There are three principal ways in which a drooping eyelid can be raised. It may be coupled to the frontalis muscle or to the superior rectus, or the levator palpebrae superioris can in one way or another be shortened. While this classification is simple, in actual practice various factors are present that have resulted in indecision and confusion. For example, there are often great differences in congenital and acquired blepharoptosis. Methods have been condemned because of certain shortcomings that are not necessarily absent from the method advocated by the critic. The accurate correction of this deformity is difficult, and in any analysis it is important to know the exact diagnosis, the method of correction in detail and the skill and experience of the operating surgeon. Things are not always what they seem. A method may be sound, but results are vastly different in different hands. This may seem trite, but it is more apropos here than in most surgical procedures.

For discussion it is convenient to divide all cases of blepharoptosis into two groups, based on the presence or absence of significant function of the levator palpebrae superioris muscle. In the absence of function of this muscle all methods of correction based on its use are eliminated. Most cases of the acquired condition (usually traumatic) fall into this group though some cases of congenital blepharoptosis also belong here. In cases of the congenital type, there often remains at least some levator function.

The method I am about to describe makes use of the frontalis muscle and is therefore applicable principally to patients without levator function. It can, however, be performed on a patient with levator function if this function is very inefficient. Coupling the lid to the frontalis muscle is historically the oldest approach to the problem but for many years has been generally condemned, or its use advised only as a last resort. The principal objections stated are that the lid lacks mobility, that the lid is often distorted and pulled away from the globe and that the patient is unable to close the lids. The last-mentioned objection is said to be serious because of the danger of irritation to the conjunctiva and cornea. In my experience most of these objections are valid against the frontalis operations traditionally described.

Lack of mobility means, of course, absence of levator function. The patient can close the lid more or less because the function of the orbicularis oculi is almost invariably intact. In this situation, the lack of mobility is not really a criticism of any method of correction.

Pulling the lid away from the globe and

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distortion of the lid are very serious objections. These difficulties are caused by the type of suspension material used and its line of pull or force. A material in very early use was a fine chain. One of the most recently advocated was a rather heavy nylon suture. Probably the most popular material with the longest history of continued use is autogenous fascia lata. All have a common form—a chain, a thread or a strip acting as a rope. The rope is started at some point on the frontalis muscle, brought down under the eyebrow into the lid and fixed near the lid margin. It then travels laterally approximately 1 cm. and is again fixed near the lid margin. Finally it returns to the frontalis muscle through a tunnel identical to and parallel with its path of descent. Various types of probes and carriers have been used to develop the tunnels and pull the strip or thread through them. Once in place, the two rope ends are pulled up

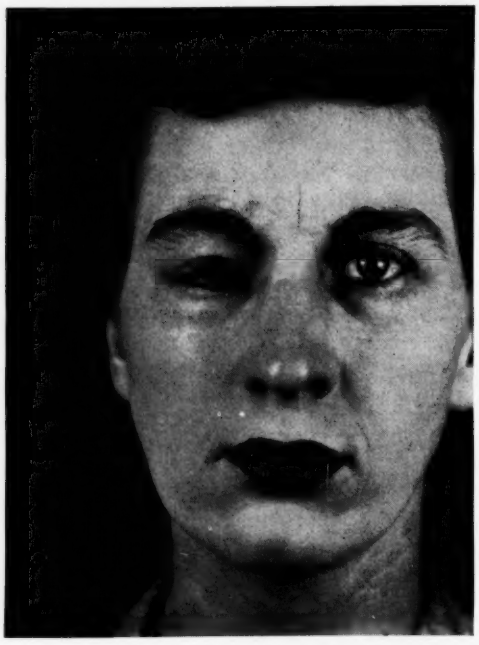

Fig. 1.—Ptosis repaired by nylon thread.

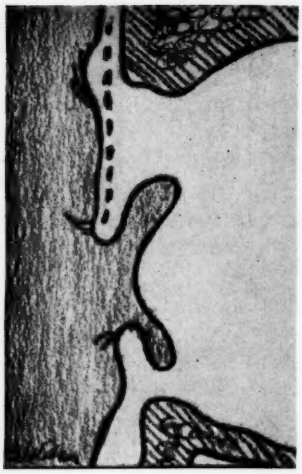

Fig. 2.—Vertical lift from lid margin to forehead pulls lid from globe.

singly and fixed to the frontalis muscle, thus raising the lid. In effect this forms a loop, and as the loop is tensed it inevitably tightens, producing the beginning of a knot. This can and often does result in distortion, usually seen as a gathering of the lid tissue. Also the upward pull of the loop tends to be focused at its inferior extremity, and notching of the margin at this point frequently occurs (Fig. 1).

The pulling away of the lid from the globe is an obvious disadvantage. The cause of this is the abnormal direction of the line of pull. In the normally acting lid the upward pull of the levator describes a graceful arc following approximately the curve of the globe. In its ascent, the lid may be said to creep up over the globe. When the lid is pulled upward by a strip running more or less vertically from the lid margin to the frontalis, there is a marked tendency for it to be lifted from the surface of the eye (Fig. 2).

These difficulties can be avoided if the correction is done in the following manner: First, a sheet of fascia lata is used. It is roughly the shape of a keystone and is used in an upside down position. An incision about 1.5 cm. long is made at the upper margin of the eyebrow. Another

incision, of the same length, is made a few millimeters above the margin of the eyelid (Fig. 3). The tissue between these incisions is undermined at a level just superficial to the orbicularis oculi muscle. The fascia lata is inserted wide end down, and its lower margin is sutured to the eyelid. I have used fine white nylon sutures, usually about four. With the lower margin fixed, the fascial sheet is smoothed neatly over the natural curve of the lid. It is now made tense by applying enough upward traction to eliminate all laxity and is

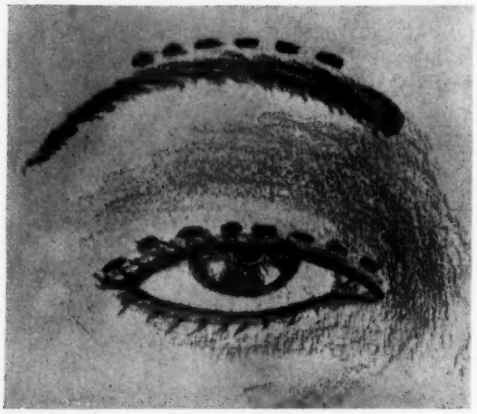

Fig. 3.—Skin incisions.

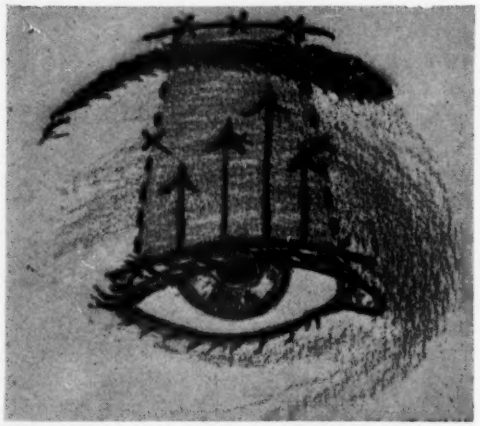

Fig. 4.—Location of suture rows. Longest arrow indicates point of maximum upward traction.

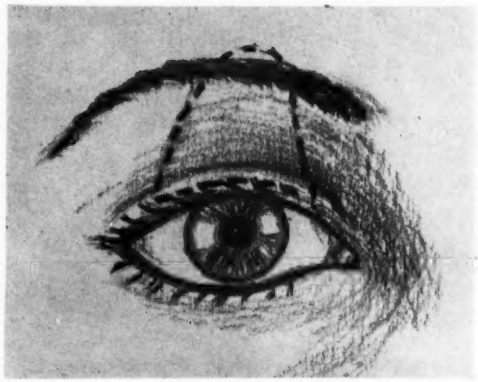

Fig. 5.—Final position of fascia; ptosis corrected.

firmly pressed against the surface of the orbicularis. While it is held in this position, several sutures are passed through the fascia lata and with a fairly deep bite through the orbicularis to the level of the tarsus. This second line of sutures is placed, on the average, about 1.5 cm. above the first row, already placed near the lid margin. There is no rule about an exact distance, as persons vary, but the desired point is where the upward and backward curve of the lid blends into the upward and forward muscle plane that terminates at the superior portion of the orbital rim (Fig. 4).

The remaining free part of the sheet of fascia is now brought up onto the frontalis muscle and appears, of course, in the depth of the incision at the margin of the eyebrow (Fig. 4). Upward traction can now be made on the ptosed lid. The lifting force is transmitted to the lid margin, but the principal direct pull will occur at the second point of fixation of the sheet. Since the line of force is not directly from the lid margin to the frontalis, the lid is not pulled away from the globe (Fig. 5). There is no loop and no effect of a knot; hence the lid shows no abnormal gathering. Since traction is being made on a sheet, there is no need for all pull to be exerted on one point near the margin, and

Fig. 6.—Coronal section of lid. Dotted line indicates position of fascia.

no notching should occur. The amount of traction can and should be varied at different points along the sheet. Naturally the strongest traction is applied where it is desired to place the highest point of the curve of the corrected lid. The normal eyelid can be used for comparison in selecting this point. Often it is approximately at the juncture of the inner and middle thirds of the lid. Once again, it is a natural appearance for the particular patient that is important, rather than a rule.

After selection of the point of greatest traction, the degree of pull is lessened in a graduated manner as one moves medially and laterally toward the margins of the sheet. When the lid is raised in this manner and one is satisfied with the position, the superior end of the fascia lata (the narrow upper margin of the inverted keystone) is firmly anchored to the frontalis muscle (Fig. 6). The cutaneous incisions are closed with fine nylon sutures. A bland ointment is poured between the lids, and a firm pressure dressing of soft cotton is applied. The cutaneous sutures are removed after one week. Occasionally I have encountered a case in which a hematoma developed beneath the undermined skin. This is merely an annoyance. After evacuation, healing proceeds and the final result is not impaired. Naturally there is considerable postoperative edema.

The final result is an eyelid that maintains a natural position with the eyes open (Fig. 7). There is no distortion, no notching of the margin and no pulling of the lid away from the globe. In forced closure and in sleep the lids will usually not close completely. While this is a disadvantage, none of my patients have suffered complications because of it. In those patients without levator function I have found this operation to give the best results. I do not recommend it as the procedure of choice in patients who have significant levator function. It will correct

Fig. 7.—Correction of acquired (traumatic) ptosis.

Fig. 8.—Correction of congenital ptosis.

their ptosis, but a well-executed operation on the levator muscle will do this and will also permit the lid to move and close in a normal or almost normal manner (Fig. 8). This last statement presumes the availability of an experienced surgeon, but exact correction is so difficult and mistakes often so irreparable that none other should attempt it.

SUMMARY

The author describes an operative technic for blepharoptosis that enables the surgeon to avoid the pulling away of the lid from the globe. It is recommended for patients without function of the levator muscle. Although it will correct ptosis in patients who have levator function, a well-executed operation on the levator muscle will do the same and will also permit the lid to move and close normally or almost normally.

RÉSUMÉ

L'auteur décrit une technique opérative pour la blepharoptose qui évite de tirer la paupière du globe. La méthode est recommandée pour des malades auxquels le muscle levateur ne fonctionne pas. Malgré que l'opération corrige la ptosis à des malades qui ont un levateur fonctionnant, une opération au muscle levateur bien exécutée aura le même succès et permettra aussi de mouvoir et fermer la paupière normalément ou presqe normalément.

ZUSAMMENFASSUNG

Der Verfasser beschreibt ein Operationsverfahren zur Behandlung der Ptose des oberen Augenlides, das dem Chirurgen gestattet, das Wegziehen des Lides vom Augapfel zu vermeiden. Das Verfahren empfiehlt sich für Kranke, die keine Funktion des Levatormuskels haben. Die Methode behebt zwar auch die Ptose bei Kranken mit erhaltener Levatorfunktion; dasselbe kann aber auch mit einer gut ausgeführten Operation erreicht werden und bietet noch dazu dem Lid die Möglichkeit normaler oder fast normaler Bewegung und Schliessung.

RIASSUNTO

L'autore descrive una tecnica operatoria per la cura della blefaroptosi che consente di evitare di allontanare la palpebra dal globo oculare. E'indicata nei pazienti che non hanno la funzione del muscolo elevatore. L'intervento ben eseguito sul muscolo elevatore consentirà alla palpebra di muoversi e di chiudersi normalmente o quasi.

SUMARIO

O autor descreve uma técnica operatória para a blefaroptose que possibilita ao cirurgião evitar de afastar a pálpebra do globo ocular. É recomendada aos pacientes sem função do músculo elevador. Embora corrija a ptose em pacientes comfunção do elevador, uma operação bem executada sôbre o músculo elevador será a mesma e também permitirá à pálpebra mover-se e fachar-se normalmente ou quase normalmente.

RESUMEN

El autor describe una técnica quirúrgica para blefaroptosis, de manera que el cirujano evita la tracción del párpado sobre ele blobo ocular. Se recomienda en pacientes sin función del músculo elevador, aun cuandocorrige la ptosis en pacientes con dicha función; bien realizada sobre el músculo elevador permite que el párpado se mueva y se cierre normalmente, o casi normalmente.

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Pharmacodynamic Potentialization in Ophthalmology

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SURGERY is indebted to Laborit for the concept of artificial hibernation achieved in such a manner that it has become a therapeutic reality.

It consists of two states: pharmacodynamic potentialization and tissue refrigeration. With the first state, the homostatic defense is nullified and the production of neurovegetative reflexes stopped. These reflexes, though they originally produce desirable defense reactions, quickly become disorderly and noxious to the organism, forming a vicious circle which, if surgical shock supervenes, is fatal. So much for the disequilibrium of the post-aggressive oscillating reaction of Laborit.

Refrigeration diminishes the needs of the tissue and permits the organism (which, under refrigeration, is in the state of minimum reaction) to survive aggression which, under other conditions, would destroy it.

Potentialization is very useful in ocular surgical procedures, for the following reasons:

The eye globe, besides being a part of the anterior portion of the brain, is richly innervated by the neurovegetative system and is especially well vascularized at the level of its uveal plexus. Therefore, at its level, surgical trauma unchains neurovegetative reflexes that tend to protect the constancy of its function but which, upon being disorganized, become damaging to themselves and may lead to different accidents, the worst of which is expulsive hemorrhage. This accident can be considered the result of a vascular disorder in a defective site, in the genesis of which the neurovegetative system plays an important role. In an analogous manner the rest of the aggressive types can be considered, including the neurovegetative dystonies. As a consequence of the use of pharmacodynamic potentialization, production of the aforementioned reflexes is stopped and the disequilibrium evaded, which signifies obvious progress.

In ocular procedures it is not necessary to employ refrigeration, because the tissue needs can be supplied without difficulty by the organism, owing to the nature of the operation. On the other hand, owing to the extreme delicacy of the technic, ocular immobility is absolutely necessary, or, better still, perfect general askinesia. This is obtained by curarization assisted by potentialization and resulting in complete organic quietness.

To summarize pharmacodynamic potentialization has two aims:

1. To prevent disequilibrium of the neurovegetative system and the consequent neurovascular-humoral disequilibrium that would be provoked by the surgical maneuvers through irritation of the neurovegetative system (iridectomy, zonulotomy, etc.).

2. To obtain a kind of ocular and general "quietness" that gives the surgeon liberty and security in his maneuvers, superior to those afforded by classic local akinesia.

In order to obtain good potentialization

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of the nervous system, the fundamental principle is to combine, in small doses, different drugs whose combined action gives a good degree of sedation and organic quietness. The toxic effects of this combination are less than those of any of the individual drugs in higher doses.

The number of possible combinations is almost infinite. I use different combinations, according to the degree of sedation I wish to obtain.

In an operation for cataract, it is very important to obtain complete organic quietness; in a corneal transplant the most important factor is ocular quietness. On the other hand, in operations upon the ocular adnexae the most important factor is to diminish the incidence of hemorrhage, and in ocular medical therapy the only factors considered are neurovegetative disorders, which one tries to correct, restoring the autonomic balance.

To prevent overdosage or underdosage, the amount of each drug should be varied according to the general health of the patient, his age, constitution and emotional state and according to whether there is sclerosis of the viscera, the vessels of the nervous system. One should maintain a relatively constant blood level of the drugs. The total daily dose should be divided and given at certain intervals in those cases in which their action is desired for a longer period than would be possible with only the initial dose.

Technic.—The technic may be varied as follows:

A. *Ocular procedures*, which include (1) operations on the globe and (2) operations on the adnexae.

B. Medical ophthalmologic therapy, which consists of operations on the globe with preoperative medication.

Operations on the Globe.—Preoperative Medication: I prefer to use the medicaments listed in the accompanying table.

How can one select the drugs indicated in each case? Practice should be established along general lines, according to one's personal experience. The first consideration is the patient's general condition. For a patient in excellent general health, well nourished, with an athletic constitution, but very anxious, I use Type 1. For a patient in good general health, Type 2 is used. For young patients (10 to 15 years) and old patients who do not have advanced sclerosis of the vessels and central nervous system, I employ Type 3. For children aged 5 to 10 years and patients with sclerosis of the central nervous system and vessels, with early senile changes, cachexia and undernourishment, I use Type 4. In dealing with children under 10 years of age it is better to use general anesthesia.

The second consideration is the type of operation. All ocular operations can be classified into two large groups: (1) op-

Drugs Administered in Combination

Type of Administration	*Type 1*	*Type 2*	*Type 3*	*Type 4*
Day before operation	2 Bellergel tablets Luminal 200 mg. (*per os*)	1 Bellergel tablet Luminal, 100 mg.	1 Bellergel tablet Luminal, 100 mg.	1 Bellergel tablet Fenergan, 25 mg.
Three hours before operation	2 Bellergel tablets 50 mg. Fenergan, I. M.	2 Bellergel tablets 50 mg. Fenergan	1 Bellergel tablet 25 mg. Fenergan	1 Bellergel tablet
Two hours before operation	50 mg. Dolantine (*per os*) 100 mg. Diparcol 50 mg. Largactil	50 mg. Dolantine 50 mg. Diparcol 50 mg. Largactil	25 mg. Dolantine 50 mg. Diparcol 25 mg. Largactil	23 mg. Largactil

erations on the anterior segment of the eye and (2) operations on the posterior segment.

Potentialization helps one to carry out these operations. Quietness is absolutely necessary. In operations of the first type this can be obtained only with curare. I consider it important to use Diparcol. It enables me to use more curare because, in the respiratory tract, it has a regulating action.

For operations of the second type it is necessary only to obtain general quietness. Since most of the operations on the posterior segment (electrocoagulation, Muller's muscular resection, etc.) are quite painful, a greater degree of analgesia is desirable. This can be enhanced by the action of Dolantine.

Once the type of medication has been administered, the patient is moved to a room next to the operating theatre, where the effect of the potentialization is determined. This is done by noting the patient's emotions, blood pressure, pulse rate and respiratory rate.

A rise in blood pressure indicates fear of the operation. This fear may be hidden, the patient appearing quite calm. An increase in the pulse rate can be interpreted in the same way; it may also indicate insufficient sympathicolytic medication.

Bradycardia is due to a good degree of sedation or to excessive sympatholytic medication. Irregularities in the rate and amplitude of respiration are due to anxiety concerning the operation.

With this medication, 95 per cent of the patients come to the operating room in a state that could hardly be improved. The success of the medication depends on good clinical judgment and the ability to make a correct evaluation of the patient's general condition. This ability can easily be acquired with practice.

If the potentialization is insufficient, one should augment it until it produces the desired degree of organic quietness.

To accomplish this, I inject, by the intravenous route, the following drugs: 1. Dolantine, 25 to 100 mg., until the desired effect is obtained. 2. Diparcol, 50 to 100 mg., if there is parasympathetic predominance or saccadic respiration. 3. Ergotamine, 0.5 mg., or, better still, hydergine, 0.3 mg., if there is sympathetic predominance. 4. Nembutal, 100-200 mg., to increase the hypnosis.

Medication During the Operation.—Immediately after this, I continue with the instillation of local anesthetics and administer curare.

A 2 per cent solution of tetracaine is instilled into both conjunctival sacs every three minutes. After the third drop I use a 10 per cent solution of cocaine with epinephrine. Fifteen to twenty minutes later the anesthesia is sufficiently deep to permit operation on the anterior segment of the eye.

In operations for glaucoma, when the tension cannot be reduced by medical means and remains higher than 35 mm. of mercury, it is advisable to give, in addition, a retrobulbar injection of 2 per cent procaine hydrochloride with hyaluronidase. This usually lowers the intraocular tension and prevents sudden decompression when the eye is opened. The same can be said for operations on the posterior segment of the eye, for which local anesthesia by instillation is not sufficient.

At the same time, I start the local anesthesia. A needle is inserted into a vein for administration of curare. If it is necessary to increase the potentialization, the indicated drugs should be injected through the same needle, to avoid disturbing the patient unnecessarily. I use a syringe with 10 mg. of curare and inject 1 mg.

per minute until I obtain the desired effect.

The needle should remain in the vein throughout the operation. To maintain optimal akinesia, it is necessary to inject a few fractions of a milligram every two or three minutes; more can be injected if one wishes to increase the degree of akinesia. Curare is given in this way to prevent slight overdosing, which is not directly dangerous but may produce in the patient a sensation of anoxia and anxiety that makes it difficult or impossible to perform an adequate operation.

The total dose varies with the patient's condition and with the duration of the surgical procedure. I have used from 3 to 25 mg. There is no fixed dose.

The total dose for an individual patient should be that which produces maximal muscular relaxation without producing respiratory paralysis. It is convenient to administer oxygen by the open method. It relieves the respiratory deficit and the subjective feeling of anoxia and produces a feeling of well-being. The subjective feeling of anoxia may be due in part to the cloth that covers the patient's face.

I administer oxygen even when I am not using the curare. The simplest method of administering oxygen is to fix the rubber under the face cloth. The volume of oxygen used is of secondary importance; 50 liters per minute is adequate.

The objective signs that indicate maximal muscular relaxation, the last step in obtaining quietness, can be divided into ocular and general respiratory signs. The ocular signs are: 1. Greater mobility of the globe in its orbit. It is explored by moving the eyeball in a lateral direction with a blunt instrument. 2. Intentional nystagmus in the extreme directions of gaze. The first muscle to be affected is the medial rectus. 3. Paresis and loss of tone of the orbicularis oculi. This is identified by gently pulling apart the lid retractors. 4. Ptosis. This is observed by asking the patient to keep his eyes open and look toward his eyebrows. This should not be mistaken for the somnolence produced by the sedation. Ptosis indicates the maximum degree of curarization. It is not necessary to reach this level.

The general (respiratory) signs are: (1) intercostal respiration is inhibited, and (2) modification of the rhythm of diaphragmatic contraction.

The respiratory rhythm becomes regular in frequency and amplitude. This indicates that the optimum degree has been reached (surgical phase). A diminution in the respiratory amplitude indicates slight overdosage. When the amplitude increases, more curare should be injected. In this manner the anesthetist can maintain total akinesia throughout the operation without interfering with the surgeon.*

Postoperative Medication: Once the operation is finished, the patient is taken to his room, where the effects of the potentialization continue without further medication for about twelve hours. If it is desired to continue the potentialization for a longer period, there is no contraindication to continuing with the medication (Largactil, 25 to 50 mg.; Diparcol, 100 to 200 mg.). If the patient is conscious, one can continue the protentialization *per os*.

2. *Operations on the Ocular Adnexae; Controlled Hypotension.*—Potentialization results in controlled hypotension and permits lowering of the blood pressure to a considerable degree for a relatively long period without producing tissue anoxia, since it lowers the metabolic needs of the tissues. One must bear in mind that Largactil enhances the action of vasoplegic synapticolytic drugs; for this reason its dosage should be proportionately de-

*For further information about the administration of curare, consult the author's work in Estudios e Informaciones Ottalmologicas, Vol. IV, from which the foregoing information has been taken.

creased. In ophthalmologic procedures it is not necessary to obtain a very low pressure. The technic is therefore much simpler.

General anesthesia is necessary for nervous patients and children, as well as in operations for which local anesthesia by infiltration is insufficient or increases the technical difficulties. I start with the intravenous administration of a 1 per cent solution of procaine hydrochloride, 30 drops per minute. With it I inject Evipan or pentothal with curare to obtain superficial anesthesia (induction). After this the larynx is anesthetized with percaine, a rubber tube placed in the trachea and the anesthesia continued with ether. (The level of anesthesia and the respiration are controlled.)

The blood pressure is then taken, and 25 mg. of hexamethonium is injected intravenously. The tension is again taken. If it is not as low as desired, the patient's legs can be lowered to increase the blood content of their paralyzed capillaries. The pulse and blood pressure should be taken every five minutes. If the latter increases, one may inject, with caution, more of the drug. If, on the contrary, it falls to an alarming level, the patient's legs can be raised; if this is not sufficient, 10 to 20 mg. of ephedrine should be injected. Since the neural control of the circulatory system has been paralyzed, it responds with more intensity to small doses of this drug.

The ideal is to maintain the systolic blood pressure between 60 and 70 mm. of mercury.

The total dose of hexamethonium depends on the duration of the operation and the patient's response to it. It is not prudent to give more than 100 mg.

Local anesthesia is indicated for patients who are not excessively apprehensive. Typically, it should be used for dacryocystorhinostomy.

Fifteen minutes before the operation 10 to 20 mg. of morphine is slowly injected intravenously. Dolantine (25-50 mg.) may be used instead. After this, an intravenous drip of physiologic solution of sodium chloride, dextrose or procaine is used. Its main purpose is to facilitate the administration of other drugs that are needed throughout the operation.

In the operating room the blood pressure is taken while the surgeon injects the local anesthetic (2 per cent procaine hydrochloride with epinephrine). The anesthetist then injects through the intravenous dextrose drip 25 mg. of hexamethonium. The blood pressure and pulse rate are taken every three minutes, and, if necessary, the patient's legs are lowered. If necessary, the dose of hexamethonium may be repeated, care being taken not to give more than a total of 100 mg. If the patient is restless, a barbiturate may be administered through the dextrose drip until he is well sedated.

If, owing to technical difficulties, an intravenous drip cannot be set up, the hexamethonium may be directly injected into a vein, but the needle should be kept in place, in case more of the drug is needed. The difficulty with the latter procedure is that the needle may be obstructed between injections.

With local anesthesia, more hexamethonium is needed than when general anesthesia is used. This is probably due to the persistence of consciousness and the vasopressor action of the epinephrine used with the local anesthetic.

On the other hand, with local anesthesia one can obtain a bloodless field with higher tension, since the vasoconstrictor effect of epinephrine is added to the action of the hexamethonium.

B. *Medical Therapy.*—In those cases in which potentialization is indicated, one is interested in reestablishing the balance of the autonomic system, which in such cases is disrupted. For this purpose I

have used Largactil (25 to 100 mg. per day for periods of eight to ten days, with rest periods between). When one wishes to use this drug over a long period, it is advisable to give it by mouth (50 to 100 mg. per day). For shorter periods it is better to give it in deep intramuscular injections (25 to 50 mg.).

Why have I selected these particular drugs? Each one has individual properties that I consider indispensable. Of the barbiturates, I choose (1) luminal, for its central action on the cerebral cortex; (2) nembutal, because, given intravenously, it induces rapid and transitory hypnosis without secondary effects, and (3) pentothal, because it is a fast-acting general hypnotic when given intravenously.

Of the ganglioplegics, I choose the following drugs: 1. Diparcol, a parasympathicolytic ganglioplegic. All its actions help in "potentialization." It provides relaxation of striated muscles by central action of curare. It is a bronchodilator and has analeptic and cardiorespiratory effects; in one word, it is eupneic, a property that deepens the akinesia produced by curare. It also is hypnogenic.

2. Fenergan, which has a strong antihistaminic action and counteracts the histogenic effect of the natural curare alkaloids. In addition, it has great hypnogenic power. It also diminishes capillary permeability.

3. Hexamethonium, which is sympathicolytic. It is used for controlled hypotension.

4. Procaine which is valuable as a local anesthetic and a general analgesic.

5. Largactil which is used because of all its neuroplegic and narcobiotic properties. It is a neuroregulator and an antihermetic, and produces a "pharmacodynamic lobotomy."

Of the analgesics, I prefer dolantine, because it can be given in direct doses and is less toxic than morphine.

Of the curarizing drugs, curarine is most useful, because its effects are more constant and prolonged than are those of other drugs of this type.

Of the parasympathicolytics, I use atropine, because of its selective action.

Of the sympathicolytics, I use ergotamine and also hidergine, which is superior to others because, in addition to its main action, it is spasmolytic and adrenolytic.

Of local analgesics given by instillation, I use tetracaine (2 per cent), because of its rapid action and the good superficial anesthesia it produces, and cocaine (10 per cent) to deepen the local anesthesia and to anesthetize the whole anterior segment.

My purpose is to give a number of drugs to act upon all levels of the nervous system.

The barbiturates have a selective action on the cerebral cortex. The cerebral cortex guides all associations, including neurovegetative coordination. Fulton has recently described on the cortex of the frontal lobe a center for antonomic nerves. Therefore, in addition to its hypnotic action, the barbiturate acts upon the autonomic nervous system.

Drugs derived from dibenzo-parathiazine have a great number of actions, the most important being inhibition of the diencephalon (hypothalamic centers) and through it, the hypophysis and the whole hormonal system. It also acts upon the synapsis at the ganglia, no matter whether the latter belong to the sympathetic or to the parasympathetic system.

Antihistaminics act primarily as the name implies and also anesthetize the sensory receptors in a manner similar to the action of procaine.

Atropine and hidergine act upon the parasympathetic and sympathetic effectors, inhibiting the response to the discharge of acetylcholine or sympathine.

Curare blocks the nervous impulse at

the myoneural juncture and thus prevents muscular contraction.

The use of these drugs in combination and in small doses offers a degree of sedation far superior to that obtained by the use of only one of them, e.g., luminal or morphine. It has, also, the advantage of being less toxic and of eliminating undesirable secondary actions (excitation, decortication, liberation of primitive reflexes, vomiting, and restlessness). It stabilizes the autonomic nervous system; this cannot be attained by other methods.

The patient who has been given this medication answers questions without interest and falls into a quiet superficial sleep when his attention is not directly called for.

At the first glance, this technic may appear very complicated and not practical for the ophthalmologist. Anyone who gives it thought, however, will have to admit that there are treatments for certain diseases that are still more complex and yet are not rejected merely because of their difficulty. "Pharmacodynamic potentialization" is simple and not dangerous when the rules here given are followed.

Practical Advice.—1. If you are just beginning the use of potentialization, administer smaller doses of the drugs and thus familiarize yourself with their pharmacodynamic properties.

2. Do not shift in a radical manner from local akinesia to potentialization. Start with insufficient potentialization, without curare and local anesthesia. Later, try insufficient potentialization with general akinesia, incomplete curare and local akinesia. Increase the doses until you obtain correct potentialization and surgical akinesia. Do away first with local akinesia and later with the retrobulbar injection. A good anesthetic for local instillation is fundamental.

3. If in any case overdosage results, there is no reason for alarm. Inject cardiorespiratory stimulants; repeat if the arterial pressure has been lowered considerably and if the pulse has discharged. Do not use lobeline and picrotoxin; their action is uncertain.

4. If anoxia occurs during curarization, it is in most cases a sign of lack of sedation. Generally it can be overcome by an intravenous injection of diparcol. Only exceptionally has one to resort to prostigmine. The best prophylaxis for this complication is not to start the curarization until the patient is well potentialized.

5. The akinesthetist must always have on hand one syringe of diparcol, another of dolantine, another of curare and another of prostigmine, which will enable him to use these drugs instantaneously if necessary.

Results.—My own experience, as of November 1954, includes more than 1,000 cases. I have had no accidents, and the surgical results are excellent.

Operative and postoperative accidents are rare or nonexistent. The technics turn out to be easier and therefore more within the reach of a surgeon of ordinary ability, owing to the complete organic tranquillity. I cite my latest statistics on extraction of the lens, both transparent and cataractous, of all types and degrees of formation: Total extraction, 92.5 per cent; vitreous loss, 0.86 per cent; hyphema, 0. As to subluxated lenses in particular, I succeed in extracting them without loss of vitreous in 4 cases out of 5. I believe this figure is the most significant.

Analysis of Accidents; Diminution of Their Frequency by Potentialization.—1. *Rupture of the Lens Capsule:* This accident cannot be directly modified, since it depends on the weakness of the capsule as compared with the strength of the zonula. It is only slightly affected by a greater or less degree of ocular quietness. On the other hand, it increases the percentage of those which can be extracted *in toto*, once the capsule has been ruptured. The reason

for this is vitreous quietness.

2. *Loss of Vitreous:* This is practically nonexistent (0.86 per cent in my first series of patients, which probably can be bettered). This is possible because of the vitreous quietness. The difference in the frequency of vitreous loss as compared to that in 1945 is evident. This is especially noticeable in the extraction of subluxated lenses.

3. *Herniation of the Iris:* This accident is the consequence of a defect in healing of the wound and nature's attempt to close the defect. It is due to badly placed complementary sutures and lack of vitreous quietness. It can also be due to deficiency in the iridectomy and reposition of the iris.

Potentialization helps in reducing the incidence of iris herniation by producing a good degree of ocular akinesia and thus reducing the tendency for defective healing of the wound. Since the humors of the eye do not tend to leave the interior of the eye, the iris can easily be reduced and the complementary sutures placed in the correct position. With a nervous and restless patient one can prolong potentialization for the necessary period without interfering with the patient's general condition and with a beneficial effect.

The same can be said of peripheral synechiae, defective healing of the wound, and delayed re-formation of the anterior chamber.

4. *Hyphemas:* These are due to defective healing, sudden movements on the part of the patient, straining, changes in the iris, the size of the iris (medical mydriasis) and uveal congestion.

Moreu explains the pathogenesis of postoperative hyphema by disturbances in the metabolism of the anterior segment of the eye after extraction of the lens, expressing the opinion that this is associated with disturbances of the sympathetic system; if, then, one prevents defective healing of the wound, straining and effort on the part of the patient, uveal congestion and disturbances of the sympathetic system, hyphemas will not occur.

If the first dressing is postponed to the sixth day (this is possible; thanks to penicillin) one may avoid the danger of early dressing (contractions, medical mydriasis, etc. The latter is not necessary, since there should not be any ciliary reaction).

8. *Choroidal Detachment:* In the majority of cases this is due to delayed reformation of the anterior chamber (fistulization): therefore the condition is practically the same as with iris herniation.

9. *Retinal Detachment:* This is due in the majority of cases to loss or herniation of vitreous. If these are avoided, the frequency of retinal detachment will be lessened.

10. *Secondary Glaucoma:* This will not occur if one prevents the onset of its causes, e.g., hernia, peripheral synechiae or obstruction of the angle of the anterior chamber with lens matter.

These accidents should not occur when the operation is correctly performed. This is easier to accomplish with a good degree of potentialization.

11. *Expulsive Hemorrhage:* The cause of this accident is unknown. Many theories have been advanced to explain its origin. Of the predisposing causes, the most probable are: (1) alterations in the vascular wall (increase in capillary fragility and permeability); (2) blood dyscrasias, and (3) ocular hypertension.

The hemorrhage does not occur without another factor, namely, opening of the eyeball, which produces pressure disturbances, neurovasculo-humoral changes that lead to expulsive hemorrhage if the previous predisposing conditions exist. If to this are added sudden movements and effort on the part of the patient, uveal congestion or vitreous loss, the frequency of this accident is increased. It is a fatal ac-

cident and may appear at the moment one opens the eye or even ten to fifteen days later, when the sutures are removed.

Arruga has said that a retrobulbar injection lowers the incidence of this accident during the operation. In my opinion this is due to its rapid "disjunctive effect" upon the autonomic system. This effect disappears rapidly and may produce an autonomic imbalance capable, under favorable conditions, of initiating expulsive hemorrhage. On the contrary, if the autonomic system is sedated and in good and permanent balance, the incidence of this accident is reduced. The same can be said for vitreous hemorrhages.

13. *Secondary Cataract:* This is due to remnants of lens matter between the anterior and posterior lens capsules. Its formation is rare when one can perform a good lavage of the anterior chamber without having to fear intraocular ectasia.

14. *Tertiary Cataract:* If one eliminates the inflammatory processes and infections by the systematic administration of penicillin, with minimal operative trauma, it would never present itself.

In corneal grafts, partial ectopia, defectively healing synechiae, iris herniation, hyphema and secondary glaucoma have a similar cause. Opacification of the graft and partial hypotrophy are physiologic accidents, occasionally secondary to other complications. In some instances they occur forty to fifty days after the operation, after a good postoperative course and without an apparent cause.

A study of my own cases confirms the great usefulness of "potentialization" to the ocular surgeon. My statistics on results are sufficiently expressive to be labeled "self-evident."

SUMMARY

Pharmacodynamic potentialization is very useful in ocular surgical procedures, owing to the "organic quietness" it affords the patient (crepuscular state, neurovegetative stabilization, perfect general akinesia). It permits the execution of surgical maneuvers without risk of accidents and false moves and all the failures that usually accompany them. In addition, it reduces the danger of operation in difficult cases, keeps the patient's mind from dwelling on the importance of the operation and eliminates the danger of an agitated postoperative period.

The technic is easy and not dangerous. A study of the general condition of the patient must be made, and knowledge of the pharmacodynamic properties of the medicines employed is necessary.

SUMARIO

A potencialização farmacodinâmica é de muita utilidade na cirurgia ocular devido à "quietude orgânica" que confere ao paciente (estado crepuscular, estabilização neurovegtativa, acinesia geral perfeita). Permite a execução de manobras cirúrgicas sem risco de falsos movimentos e acidentes, com todas as falhas que em geral as acompanham. Reduz ainda o perigo operatório em casos difíceis. Além do mais, afasta o pensamento do paciente sôbre a importância da operação e elimina os perigos de um pós-operatório agitado.

A técnica é simple e não perigosa. Um estudo de condição geral do paciente deve ser feito, sendo necessário o conhecimento da farmacodinâmica das drogas empregadas.

RÉSUMÉ

La potentialisation pharmacodynamique est très utile dans la chirurgie oculaire a cause de la "tranquillité Organique" qu'elle offre au malade (état crepusculaire, stabilisation neuro-vegetative, akinesie générale parfaite).

Elle permet l'exécution des maneuvres sans risquer des faux pas et accidents, avec touts les malheurs qui les accom-

pagner en général. En outre cela réduit les danges de l'opération et élimine le danger d'une période postopérative agitée.

La technique est facile et pas dangereuse. Il faut faire une étude de la condition générale du malade et connaitre la pharmacodynamie des médicaments employes.

RIASSUNTO

Gli sviluppi della potencializacione farmacodinamica in oftalmalogia sone molto interessanti in rapporto alla chirurgia oculare per la "quiete organica" che si può produrre nel paziente (stati crepuscolari, stabilizzazione neurovegetativa, acinesia generale perfetta). Essi consentono l'esecuzione di manovre chirurgiche senza rischi; riducono, inoltre, la possibilità di danni negli interventi difficili, tengono lontana l'attenzione del paziente dalla gravita dell'atto operatorio ed eliminano gli inconvenienti dell'agitazione post-operatoria. La tecnica è semplice e non pericolosa; si deve studiare il malato dal punto di vista generale ed è necessaria una conoscenza per fetta sulla farmacodinamica delle sostanze impiegate.

ZUSAMMENFASSUNG

Die pharmakodynamische Potenzierung ist in der Augenchirurgie sehr nützlich, weil sie zu einer "organischen Gemütsruhe" des Kranken (Dämmerungszustand, neurovegetative Stabilisierung, völlige allgemeine Bewegungsarmut) führt. Sie ermöglicht die Ausführung chirurgischer Manöver ohne das Risiko falscher Bewegungen oder unerwünschter Zwischenfälle, die gewöhnlich zu allen möglichen Fehlresultaten führen können. Darüber hinaus lassen sich in schwierigen Fällen die Gefahren der Operation herabsetzen. Ferner lassen sich die Gedanken des Patienten von der Konzentration auf die Wichtigkeit der Operation abhalten, und die Gefahren einer aufgeregten Periode nach der Operation können vermieden werden.

Die Technik ist einfach und ungefährlich. Eine Untersuchung des Gesamtzustandes des Kranken muss durchgeführt werden, und Vertrautheit mit den pharmakodynamischen Eigenschaften der angewandten Medikamente ist notwendig.

RESUMEN

La potencialización farmacodinámica es muy útil en cirugía ocular debido a "la quietud orgánica" que ofrece al paciente (estado crepuscular, estabilización neurovegetativa, aquinesia general perfecta). Permite la ejecución de maniobras quirúrgicas sin el riesgo de movimientos falsos y accidentes, con todos los fracasos que los acompañan. En casos difíciles reduce el peligro de la operación; más aún, mantiene a la mente del paciente alejada de la importancia de la operación y elimina los peligros de un postoperatorio agitado.

La técnica es fácil y no peligrosa; debe hacerse un estudio general del paciente y conocerse la farmacodinamia de las medicinas que pueden emplearse.

Author's Note: This work is a summary of the ideas and results obtained by the author which are published in Spanish, French and English entitled "Pharmacodynamic Potentialization in Ophthalmology" May 1954, Barcelona, Spain, edited by "Estudio e Informaciones Oftalmológicas of the Instituto Barraquer."

Nonmagnetic Intraocular Foreign Bodies

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THE greatly increased number of cases of intraocular foreign body resulting from accelerated industrial effort and the nature of ocular combat injuries makes this subject of special interest to the ophthalmologist today.

With the acceleration of industry has come the employment of large numbers of unskilled, inexperienced personnel and a relative laxness in protective and preventive measures (goggles, shields, etc.).

There has also been an increase of such cases in civilian life with wider use and misuse of poor quality tools, especially hammers, chisels, hatchets and improvised hand tools. We have seen this in patients coming from the farm and home.

Moreover, the number of cases of nonmagnetic foreign bodies has increased both in industry and in combat. Industry is now making greater use of various nonferrous metals and nonmagnetic alloys. The recognition by German and Italian forces in the early days of the North African desert campaigns of the fact that steel land mines and booby traps were readily discovered with magnetic locators resulted in the substitution of copper, other nonferrous metals and even bakelite in their construction, according to Stallard.[1] The resulting explosions of these mines and of other bombs in combat and aerial warfare have caused many new problems for the ophthalmic surgeon.

Whereas the magnet was the miracle tool for the magnetic intraocular foreign body, it was worthless for high manganese steel alloys, for copper, brass, lead, aluminum, wood and other substances. (Frequently, the ophthalmologist threw his hands up at sight of a patient with a nonmagnetic intraocular foreign body. With improved roentgen localization and improved surgical technic, however, a number of eyes so affected can be saved from blindness.

Many problems face the ophthalmologist in every case of ocular injury by solid bodies:

1. What should lead one to suspect an intraocular foreign body?
2. What are the external clinical evidences of such a body?
3. Should roentgenograms be taken?
4. What is a rapid and simple method of roentgen localization?
5. Are there methods (aside from the history) to tell one whether one is dealing with a magnetic or a nonmagnetic particle?
6. Should the magnet be used for diagnosis?
7. How should one proceed with nonmagnetic foreign bodies in an attempt to save the globe?
8. What foreign bodies may remain undisturbed?
9. What are useful measures for prevention of infection?
10. What are the essential safety measures during operations?
11. What steps can one take to prevent retinal detachment incident to transcleral operation?
12. What about sympathetic ophthalmia?

I shall attempt to answer some of the foregoing and other related questions that deal with nonmagnetic intraocular foreign bodies. It does not necessarily follow that

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an eye containing a piece of copper or brass is doomed and should be treated by enucleation. Measures and technics are available that will save many such eyes, and every resource must be used, especially when both eyes harbor foreign bodies or when only one seeing globe remains.

It is also my purpose in this paper to review the various procedures that I have found useful in removing over 70 nonmagnetic foreign bodies from the cornea, anterior chamber, iris, lens, ciliary body, sclera and vitreous.

History.—A detailed history of injury is extremely important. Any eye that was injured while the patient was hammering, drilling or working with moving machinery, or was exposed to flying particles from another workman's tools, to an explosion or to the shattering of any solid (glass, wood, metal, etc.) should be considered as possibly harboring an intraocular foreign body. A careful description and examination (when possible) of the tools and objects employed at the time of injury helps in differentiating magnetic from nonmagnetic fragments. Stallard,[1] writing about the North African desert campaign, noted that the analysis of exploded bomb fragments lodged in the face gives a clue as to the nature of the possible intraocular foreign body. One may thus often have a clue as to whether a foreign body is magnetic or nonmagnetic or whether it is glass or some other substance. At times it is possible to discover, by questioning the patient, the approximate size of the offending particle and the course it took toward the eye, coming from below or above or from the right or the left.

The removal of foreign material from the conjunctival sac or the corneal surface should by no means lull one's senses into dismissing the patient without further careful investigation. Too often does one see instances in which a so-called corneal foreign body was removed or nothing was found, and the patient was dismissed, only to turn up later with siderosis, cataract or blindness.

Clinical Examination.—The visual acuity of both eyes should be recorded when possible. A careful examination of the entire anterior segment for evidence of perforation is paramount. This must be done with both loupe and slit lamp microscope. (A drop of pontocaine facilitates this.) A perforation of Bowman's and especially Descemet's membrane leaves permanent telltale evidence. A small bloody blotch on the sclera shortly after injury may be the only evidence of perforation. A further careful search with the ophthalmoscope gives valuable information about the iris, lens, vitreous and retina. With the instruments mentioned one can often follow the trajectory and course of the flying particle in the eye and thus help to localize it. One should remember, however, that occasionally flying particles may recoil from the sclera into an unsuspected part of the vitreous chamber.

The examinations also reveal degenerative and chemical pigmentation changes, such as siderosis or chalkosis.

A knowledge of the tension in early injuries gives information about the presence of a leaking wound. It is of course easier to recognize and diagnose the condition shortly after injury. This is true particularly of small scleral perforations, which may heal within a few days and defy recognition.

The transilluminator is valuable in discovering holes in the iris and even in the ciliary body and choroid.

Both eyes must be carefully examined. It has happened thrice in my experience that a patient coming in with an injury of one eye harbored a foreign body in the other. All methods of examination should be employed.

Roentgen Localization.—In any case in which there is the possibility that an intraocular foreign body is present, roentgen examination should be made, first for diagnosis and then for localization. The presence of such a body should be suspected in every case in which there is a history of hammering, shattering or explosion, even when clinical examination reveals no abnormality. If the diagnostic roentgenogram is normal when taken posteriorly to anteriorly in the chin-nose position, it should be repeated with several different exposures, so as to provide films of different densities and angles. Small foreign bodies can sometimes be demonstrated in this manner. Of course, only roentgen-opaque substances, such as metals, show up. Glass, wood and plastics do not show up in roentgen films of the eye. An extremely valuable procedure for the detection of foreign bodies in the anterior segment is Vogt's "skeleton free or bone free" method for soft tissue technic.[2] A dental film or a small specially shaped film is held along the side of the nose and pressed into the inner canthus. The lids are drawn apart, and a profile roentgen film of the exposed globe is taken from the temporal side. The film can also be pressed into the lower fornix and a roentgen film taken from above. This method shows up minute foreign bodies in the anterior chamber angle or anywhere in the anterior segment. It will even show glass if taken with soft rays. More of the anterior half of the eyeball can be exposed by producing artificial proptosis with 2 to 4 cc. of procaine hydrochloride or an isotonic solution of sodium chloride injected retrobulbarly. Comberg's[3] contact lens method of roentgen localization has deservedly gained in popularity in recent years. It is simple and accurate if performed with reasonable care. Its chief proponent in this country has been Pfeiffer.[4] A drop of tetracaine hydrochloride, 0.5 per cent, is instilled in the conjunctival sac. The contact lens, bearing four lead markers, is inserted between the lids, and two exposures are taken, viz., a lateral exposure with the involved eye nearest the film and a posteroanterior exposure with the head in the chin-nose position. For the anteroposterior view the patient looks into a small pocket mirror on the roentgen table at the reflection of either his injured or his healthy eye. If the eyes are not parallel or only one eye is present, a cover glass on a black cardboard triangle wedge base serves as an angle mirror in which can be seen an adjustable reflected light source, such as a pocket flashlight. The purpose, of course, is to have the visual axis perpendicular to the film and the central roentgen ray passing through the visual axis. The chief objection to the Comberg lens is that it does not always lie coaxially with the cornea; another is its fragility when dropped. In the past three years I have frequently used a plastic[5] localizing shell similar to the Comberg lens (Fig. 1*A*). To obviate displacement of the lens on the globe, I recently modified the Comberg lens by having suture holes drilled near the edge, so that it may be anchored with episcleral sutures. A vent hole was also placed in the corneal portion near the limbus to help break suction adherence, which occasionally impedes removal of the contact lens. The plastic lens is useful if one is interested in localization only. The glass lens, however, has certain advantages for visualization of the globe. It outlines the anterior portion of the globe and, when studied in stereoscopic[5] lateral and anteroposterior views, gives one an excellent idea as to the location of the ocular foreign body. It has given me a better tridimensional concept. On reading a draft of Spaeth's[6] paper before the Section on Ophthalmology at the Ninety-Second Annual Session of the American Medical Association in 1942,

I was impressed with the value of stereoscopic roentgen pictures of the eye when air had been injected into Tenon's space according to the method of Gasteiger and Grauer abroad and Spackman[7] of Philadelphia. This air injection method I combined with use of the Comberg glass lens.[5] The entire globe was thus outlined when viewed stereoscopically, and "borderline cases" of double perforation were more readily diagnosed.

Roentgen localization must be extremely accurate, for it controls the method of approach and the site of the globe incision in these cases. The Comberg and Vogt methods are simple, rapid and accurate. They can be performed with a minimum of apparatus. Graham's roentgen localization method[8] with a 12 mm. diameter silver wire ring sutured to the limbus has proved valuable in the handling of ocular injuries in the African desert campaign. Spaeth[6] uses silver rings of several diameters sutured to the globe for roentgen localization. Sweet's localizer is an accurate method requiring special apparatus.

An eye may harbor two or more foreign bodies. This happens occasionally in civilian life and more frequently in combat injuries, and sometimes this complicates localization. Stokes mentioned that in 300 cases of intraocular foreign bodies the roentgen examination gave negative results in 2.5 per cent of cases. It is possible that Vogt's method or variation of exposure technic might show up the foreign body in some of these cases (which evidently harbored minute or flat foreign bodies lying parallel with the horizontal plane of the eye). The methods formerly used for differentiating nonmagnetic from magnetic foreign bodies, aside from the history and examination of tools and analysis of fragments taken from the face[1] or other parts of the body in explosion injuries, consisted of the magnet test. This is a dangerous method, because the magnet, during the test, may pull the foreign body into the ciliary or the lens or may wedge it deeper. The magnet should never be used in a test except when roentgen localization has been completed and the method of approach decided on, and then only in the operating room when one is ready to proceed with the operation.

The Berman Locator.—In the past eleven years I have used a Berman locator.[9] This is an extremely valuable instrument, first, for determining whether an intraocular foreign body is magnetic and, second, to localize the magnetic foreign body. It was used originally at Pearl Harbor by Moorhead[10] in December 1941. Minsky[11] recently described its application for the transscleral approach. I have found it valuable for localization in all cases of magnetic foreign body and in differentiating a nonmagnetic vitreous foreign body. It has not proved useful in localizing small nonmagnetic foreign bodies. My interest was attracted to it by having seen it used at the New York Eye and Ear Infirmary in the autumn of 1943.

Glass and other chemically inert foreign bodies, such as aluminum and stainless steel alloys, apparently do not irritate the eye, and when they are in relatively inaccessible positions or when they do not produce mechanical irritation or pressure, they are best left alone.

Copper and its alloys and most iron particles are extremely dangerous to the eye. It is well to follow the generally accepted dictum ably expressed by Snell.[12] Every reasonable attempt should be made to remove a nonmagnetic foreign body, if the operation does not cause excessive mutilation of the eye. It is well to see the patient early, to do all necessary examinations immediately and then to decide whether operation or expectant conservative treatment had best be followed for the time being. When an attempt at removal

of multiple intraocular foreign bodies would mutilate the globe, discretion is the better part of valor.

Preparation of the Patient for Operation.—A barbituric sedative, such as 1½ grains (0.1 Gm.) of pentobarbital, is given one hour before the operation, if it is to be done with local anesthesia. The skin is cleansed in the usual manner.

Local anesthesia and akinesia are obtained as follows:

1. Topical instillation of 3 drops of 0.5 per cent tetracaine, or pontocaine, hydrochloride at intervals of one minute.

2. Subconjunctival injection of 2 per cent procaine hydrochloride containing 1:30,000 epinephrine. It is often valuable to inject the superior rectus.

3. Retrobulbar injection of 1 cc. of 2 per cent procaine hydrochloride with 1:30,000 epinephrine between the lateral and the inferior recti.

4. Akinesia by (a) O'Brien's method: injection 10 mm. in front of the ear notch (incisura intertragica) of 3 to 4 cc. of 2 per cent procaine with 1:75,000 epinephrine (1 minim of 1:1,000 epinephrine in 5 cc. of procaine); (b) Van Lint's method; injection of the aforementioned procaine and epinephrine mixture at the lateral border of the orbit.

5. Lateral canthus injection of 0.25 cc. of the procaine-epinephrine mixture to facilitate canthotomy if necessary.

For general anesthesia, sodium pentothal administered intravenously or solution of tribomoethanol with ether is adequate.

Retrobulbar injection and akinesia may be omitted when the globe is not to be opened.

Operative Technic.—Cornea: The method of removal of foreign bodies from the cornea depends on their depth, which is determined with the narrow beam of the slit lamp. The use of an angled spud working at the edge of the embedded corneal foreign body so as to pry it out is a relatively simple procedure. When there are multiple foreign bodies, the 1 mm. curet is extremely useful in their removal.

When a sliver of brass or wood lies between the corneal lamellae, it can be extracted with a splinter forceps having special teeth (Fig. 1*B*). I have found this useful in the past twenty years. Sometimes it becomes necessary to cut down through the overlying lamellae and to pry the splinter loose. It is very important to remove wood splinters or thorns thoroughly, as they cause prolonged irritation. Multiple small fragments of coal or glass completely enclosed in corneal stroma are well tolerated and may remain undisturbed.

Fragments in the pupil zone of the cornea that have penetrated partly into the anterior chamber are best handled by following Kuhn's[12] suggestion: The pupil is contracted with physotigmine. A narrow keratome, such as Agnew's or Castroviejo's, is inserted into the anterior chamber across the pupil zone and anchored in the opposite side to prevent injuring the lens capsule. One then cuts down with a knife needle until the foreign body is reached (Fig. 1*C*). It is then removed with the aforementioned corneal splinter forceps. Penetrating fragments outside the pupillary zone are reached by performing a corneal section with a Graefe knife or a keratome and scissors. The corneal flap is turned inside out, and the projecting splinter is removed with the aforementioned forceps (Fig. 1*D*). The corneal incision is closed with previously inserted corneoscleral sutures. A conjunctival flap may be prepared prior to performing the corneal section.

Anterior Chamber.—Nonmagnetic foreign bodies lying loose in the anterior chamber can be removed through a keratome incision in the particular quadrant where the foreign body lies. The anterior

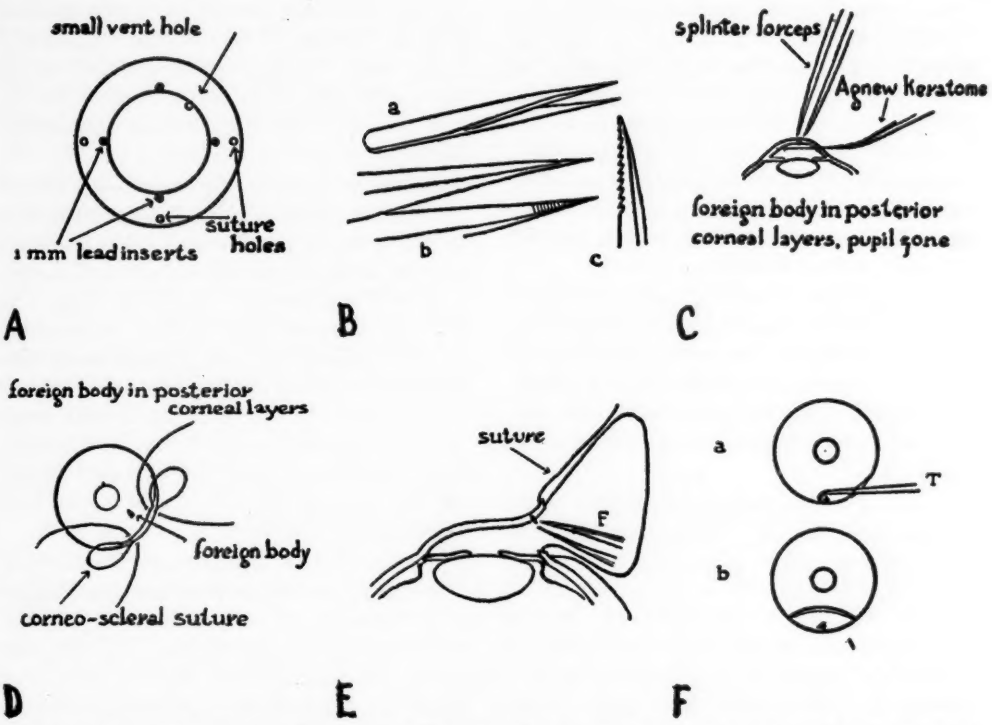

Fig. 1.—*A*, modified Comberg localizing shell made of glass or plastic material. Three suture holes permit anchoring to episclera. *B*, author's corneal splinter forceps: *a*, general appearance of forceps; *b*, larger view showing sharp points and direction of serrations; *c*, lateral view illustrating serrations pointing backward. These toothlike serrations allow a good grasp. *C*, Kuhn's method of attack for perforating corneal splinter in pupillary zone amplified by use of corneal splinter forceps. *D*, limbal incision and sutures for peripherally located penetrating corneal foreign body. *E*, second step: removal of splinter from everted cornea with forceps (*F*) through a keratotomy. *F*, *a*, use of Tyrell hook through a keratotomy to dislodge a particle wedged in the chamber angle; *b*, Lancaster's method of performing keratotomy forward, so that a forceps can reach into the chamber angle.

chamber should always be restored with the chamber irrigator (isotonic solution of sodium chloride). If the corneal incision is near the limbus, a corneoscleral suture should be used to prevent iris prolapse. The Mendoza type of suture or a mattress suture may be employed. The Burch corneal pic and the Hoffman pic are useful in suturing corneal lacerations. Atraumatic needles are very helpful, such as the Grieshaber type.

Chamber Angle.—Most foreign bodies in the anterior chamber lodge in the lower angle, and sometimes they are wedged there and covered by exudate. The use of intravenous Corticotropin (ACTH), 25 to 40 mgm. in 500 cc. of 0.5 per cent dextrose solution twenty-four hours prior to operation has facilitated absorption of the incarcerating exudate and simplified the removal of such foreign bodies. They can be seen with the diagnostic chamber angle contact lens if they lie behind the scleral ledge. To remove them, keratotomy is made to the side and the foreign body is pried loose with a blunt Tyrell iris hook (Fig. 1*E*), after which it is removed with the serrated nontoothed iris or clot for-

ceps. Lancaster has suggested making a corneal section forward with a narrow Graefe knife and then reaching into the angle with the clot forceps (Fig. 1*F*). Meller suggested the application of a corneoscleral trephine over the foreign body and hinging the button (Fig. 2*A*). After the foreign body has been removed with forceps, the corneoscleral button can be replaced with a suture.

Nonmagnetic foreign bodies embedded in iris tissue should be disentangled with forceps through a keratome incision. If this is impossible, or if the iris is traumatized excessively, the portion of iris containing the foreign body should be excised.

Lens.—Foreign bodies in the lens cause traumatic cataract. Sometimes this is slow in developing. However, because of the low metabolic lens activity, lenticular foreign bodies are well tolerated. To remove such fragments one might employ Donovan's[13] method, described before the Section on Ophthalmology in 1925. A 19-gauge hypodermic needle is inserted into the lens through a small keratome incision up to the foreign body, and suction is made with the attached syringe plunger. On the other hand, the usual practice is to wait until the lens becomes opaque and deliver it in capsule. An elderly patient may have the lens extraction with capsule forceps and pressure from without. In a younger patient with a tough zonule it is safer to use the Weber loop or a flat lens spoon at the upper equatorial portion of the lens, with counterpressure below according to the method of Pagenstecher (Fig. 2*B*). A small amount of vitreous may be lost at times, but this is guarded against by previously inserted corneoscleral sutures.

If the foreign body lies near the anterior capsule and one is timid about the intracapsular extraction, it is good practice to grasp the nonmagnetic particle and its overlying capsule with the toothed capsule forceps. If the foreign body is lost in the depths of the lens, it may be located with the transilluminator applied to the sclera. (The pupil should be maximally dilated.)

Posterior Aqueous Chamber.—Accurate localization is essential. A Gayet incision is made with Lundsgaard's knife. This can be done externally or subconjunctivally with a previously dissected flap. The McLean corneoscleral suture is inserted. Iridodialysis at the root is performed with pointed scissors, and the iris is pulled out of the way with the blunt Tyrell hook. The corneal flap is lifted up. The foreign body is grasped with the serrated blades of the clot forceps. It is sometimes seen enveloped in exudate.

Ciliary Body (Nonmagnetic Particle).—Here again accurate roentgen localization is paramount. A conjunctival flap including Tenon's capsule is dissected forward from 10 mm. behind the limbus. The sclera is exposed and the exact spot for incision marked with gentian violet. A meridional incision with a No. 15 Bard Parker blade is made in the sclera overlying the foreign body. This is facilitated by inserting a Mendoza suture after the first few strokes and having the assistant pull upward on both sides of the loop. This helps to pull the sclera away from the ciliary body. Burch's method for making a scleral incision may be used by making parallel episcleral sutures, one on each side of the incision, and drawing up on them. The incision is made carefully and deliberately. It is made 4 to 5 mm. long and may be enlarged with Stevens scissors. If one now pulls up on the scleral sutures so as to open the incision, the foreign body may appear in the wound (Fig. 2*C*). For hemostasis it is now useful to place a drop of thromboplastin and a drop of 1:100 solution of epinephrine between the lips of the incision. One waits a few

moments for the foreign body to appear. If the foreign body lies deeper in the ciliary body, the latter can now be incised radially. If the particle is seen it can be seized with serrated dressing forceps. Aid may be had from the Lancaster or Lange transilluminator applied to the opposite side of the globe. If the ciliary body prolapses, it is abscised. The incision is closed with the aforementioned Mendoza suture. The conjunctiva is replaced and closed with running silk sutures. I have employed both methods successfully on several occasions. In passing, one should mention the pars plana approach according to Verhoeff's[14] and Fralick's[15] methods for the extraction of magnetic particles.

Vitreous.—An eye with a piece of copper or brass in the vitreous was formerly given up as lost. Today instruments and methods are available for salvaging many such eyes. Several methods are applicable, depending on the location of the foreign body and on its visibility with the ophthalmoscope. The prognosis is affected materially by its location. Foreign bodies close to the optic nerve offer a poorer prognosis.

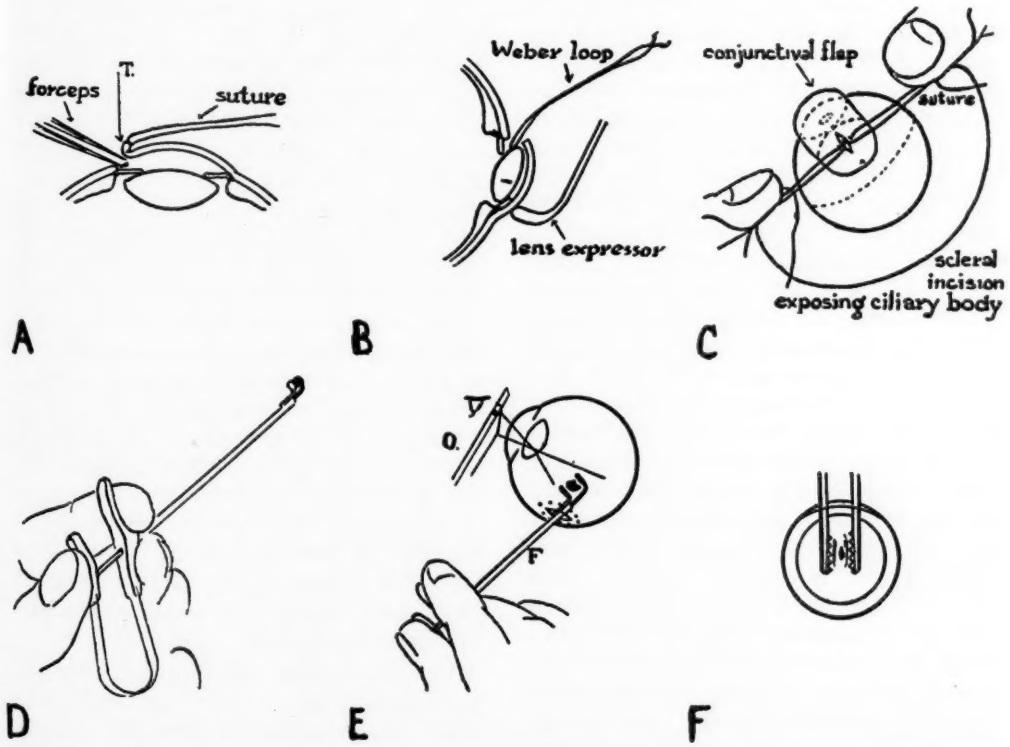

Fig. 2.—*A*, Meller's method for reaching a nonmagnetic foreign body in the chamber angle with aid of hinged trephine button, *T*. *B*, intracapsular extraction of lens containing foreign body, using Weber's wire loop and pressure from without. *C*, method of exposing ciliary body with Mendoza suture to remove particle located in ciliary. *D*, vitreous self-closing foreign body forceps. *E*, method of removal of nonmagnetic foreign body from vitreous under ophthalmoscope control, showing scleral incision and barrage. *F*, toothed capsule forceps used to grasp piece of capsule and foreign body beneath it.

First Method: When the lens is clear and the foreign body is visible with the ophthalmoscope without excessive rotation of the globe it can be approached through a meridian transscleral incision and grasped with Thorpe's self-closing vitreous forceps[16] (Fig. 2, *D* and *E*). This forceps is constructed so that it has no moving blades in the incision and thus causes a minimum of trauma to the neighboring retina and choroid.

The conjunctiva and Tenon's capsule are dissected from the globe after the quadrant of location of the foreign body has been selected. The point of election for scleral incision is marked with gentian violet. A rectangular area 8 by 4 mm. is now outlined, with coagulations of the scleral surface (Fig. 2*F*) to prevent retinal detachment. An I-shaped or T-shaped incision is made with the long axis meridionally in the sclera by gradual dissection with a No. 15 Bard Parker blade. An episcleral suture on each side of the incision pulls the sides of the incision up. The choroid and retina are opened with the diathermy knife. The incision can, however, be made with a shallow thrust of the Graefe knife. The length of the incision need not be more than 4 to 6 mm., depending on the size of the foreign body. Sometimes the foreign body appears in the wound as glistening metal or covered by exudate. In such a case it is grasped with small forceps and the scleral incision immediately closed with the aforementioned sutures. If it does not appear in the wound, one visualizes the particle with the ophthalmoscope and grasps it with Thorpe's self-closing vitreous chamber forceps introduced through the incision. The foreign body is removed and the incision closed as described. The wound may be touched with trichloroacetic acid or 95 per cent phenol[17] (or with the fused potassium hydroxide pencil and neutralized with 3 per cent acetic acid). The conjunctiva is closed with a running suture.

Second Method (with ophthalmic endoscope): I devised the ophthalmic endoscope in 1914, first in its nonluminous form, and presented it before the Section on Ophthalmology in the same year.[18] Shortly thereafter I designed a self-luminous endoscope for removal of intravitreous nonmagnetic foreign bodies. This later model was demonstrated at the October 1934 meeting of the American Academy of Ophthalmology and Otolaryngology. I have used it successfully in many cases. It has also been used clinically with success by Spaeth[6] and others.

The ophthalmic endoscope consists of (1) a light carrier with a very small miniature lamp, (2) a special inverted Galilean telescope 2.5 mm. in diameter and (3) a small tubular forceps held together in a straight line by a metal sheath (Figs. 2 and 3). In cross section the working end of the instrument measures 2.5 by 6.5 mm. The telescope affords a field of view 60 degrees in diameter, so that at a distance of 15 mm. the field is 15 mm. in diameter, at 20 mm. the field is 20 mm. in diameter, and so on. Thus, two-thirds of the interior of the eye can readily be covered by moderate tilting of the instrument. Objects at a distance of 15 mm. from the telescope objective lens are magnified 2 diameters. The magnification increases with proximity to the telescope. The lens system is so constructed that objects in the field of view are in focus at all distances from 1 to 25 mm. Thus all instrumentation can be observed directly.

Various forceps are supplied with the instrument. Some have serrated jaws with smooth edges for grasping irregularly shaped splinters; others have small cup-shaped or ring-shaped jaws for lead BB shot. The adjustable sheath may be preset for the desired depth of penetration into the globe.

Preliminary Practice With the Endoscope.—The most important factor in the application of the endoscope is to become thoroughly familiar with its use by working inside a small light-proof pill box 1 inch (2.5 cm.) in diameter, approximating the size of the eye. Since the instrument is monocular, that is a handicap one learns to overcome during practice. Then one should practice with pig's eyes into which a foreign body, such as a lead shot, has been inserted through a scleral incision. The same incision may be used for the endoscope. The lamp is connected by a cord to a preset battery or rheostat. The ophthalmic endoscope is cleansed with green soap and water. It is rinsed in distilled water and sterilized by immersing the instrument and the connecting cord in 1:1,000 mercuric oxycyanide or 1:3,500 mercuric phenyl nitrate for twenty minutes. After it has been rinsed in distilled water and wiped dry, it is ready for use. Heat sterilization, alcohol and other sterilizing chemicals (except the ones advised) will damage the lens cement and the electrical insulation and thus ruin the instrument.

When used in the operating room, the instrument is applicable in most cases in which the vitreous is not too bloody or muddy with exudate. Roentgen localization by either Sweet's or Comberg's method is performed first. The sclera is exposed in the quadrant of localization, preferably between two muscles or beneath the inferior or the superior rectus (never beneath the lateral or medial recti, because of the long ciliary arteries). A rectangular area 4 by 8 mm., with its long axis meridional, is plotted on the surface of the sclera in the quadrant of attack. The sides of this rectangle are now outlined with scleral surface coagulations 2 mm. apart. These are made either with the 1 mm. diameter flat surface electrode or with the short Kronfeld diathermy needle electrode. A meridional L-shaped scleral incision 2 by 7 mm. is now prepared with a No. 15 Bard Parker scalpel; this is cut down just to the choroid. Two Mendoza sutures are placed in the lips of the scleral incision. With these sutures the assistant can either pull the flaps of the incision open or can shut them. Epinephrine (1:100) and thromboplastin are now dropped onto the choroid to produce a bloodless field. After a few moments the field is sponged dry. The choroid and retina are now incised the full length and shape of the scleral opening with the cutting current or with a small Graefe knife, a shallow thrust being used. One now waits a few moments for the foreign body to appear in the wound. (It sometimes does, while the lips of the wound are held up with the aforementioned silk sutures.) The endoscope, held in the left hand, with the lamp lit and the forceps controlled by the right thumb and index finger, is now guided to the wound. The surgeon puts his eye to the eyepiece just as he places the working end of the instrument within the lips of the incision. He must be just within the retina or he cannot see the interior. The forceps must be kept closed and pulled up within 2 to 3 mm. of the telescope. The assistant prevents any deeper thrust of the body of the instrument while the surgeon inspects the interior of the globe in his search for the foreign body. As he is searching, he has the forceps blades turned slightly to one side. Once the foreign body is found, the surgeon gradually pushes the grasping forceps toward it, opens the forceps blades and allows the forceps to close slowly onto the foreign body. The forceps, with the foreign body retained by its self-closing spring action, is pulled up to the telescope under direct vision, and the whole instrument is removed from between the lips of the wound. Little or no vitreous is lost if the telescope is not pushed into the vitreous body. During the entire procedure one

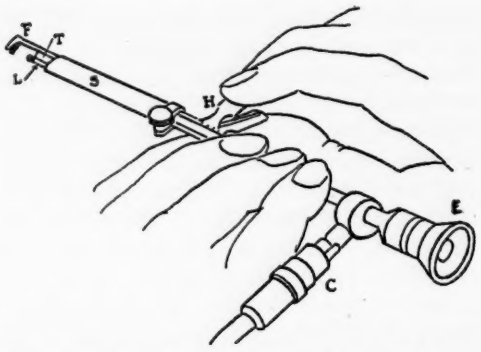

Fig. 3—Method of holding ophthalmic endoscope during operation. *F*, forceps blades; *H*, forceps operating hand; *T*, telescope; *L*, miniature lamp; *S*, adjustable sheath; *E*, eyepiece; *C*, electric connection to battery rheostat.

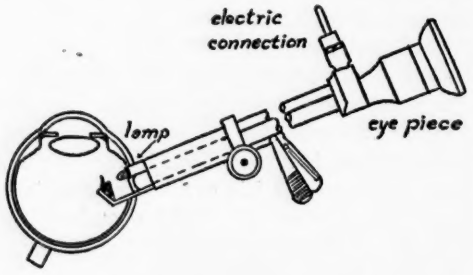

Fig. 4.—Ophthalmic endoscope: self-luminous instrument for removal of nonmagnetic intravitreous foreign bodies.

assistant also keeps the scleral lips closed against the endoscope with the aid of the sutures mentioned. As soon as the foreign body is removed, the sutures are tied, closing the scleral incision. If necessary, additional sutures may now be inserted with the aid of the Burch pic or bident. The conjunctiva is closed by a running suture. If the lens is clear, the fundus may be inspected to note the position and status of the retina.

The postoperative treatment I follow is the same as that generally used in cases of retinal detachment. After three to four weeks the patient is given Lindner Stenopaic spectacles. Of 4 patients operated on by this method, 1 has 20/30 vision; another has 20/100 vision; a third, with originally bloody vitreous and a large ciliary wound, has in the past five months come up to counting fingers, and the fourth has a soft eye with no light perception.

Considerable interest was shown in this method during World War II by military and naval medical officers as well as by ophthalmologists in civilian practice.

Third Method (scleral incision and transillumination) : This method was suggested in the presentation of the first (nonluminous) model of the ophthalmic endoscope[19] in 1934.[20]

A scleral incision is prepared as is usual for the transcleral approach, with the addition of surface diathermy for prevention of retinal detachment, as described for the second method. One or two transilluminators are placed on the opposite walls of the globe, and as one inspects the open incision one may see the shadow of the foreign body. It is grasped with small dressing forceps. The sclera is closed with previously inserted sutures. This method has proved useful to me in many instances. Schutz[21] has recently applied the method. Lindner[22] recommended this approach.

As a general comment on surgery of the vitreous, it is paramount not to grope in the vitreous blindly. It is highly important not to fish around in and generally lacerate the vitreous. The forceps should be small and simple-acting and should approach the foreign body directly by the shortest and most feasible route. One must guard against damaging the retina and other vital structures. One must have a definite plan of approach and *modus operandi*, worked out on the basis of accurate localization. This is done in the form of a sketch or diagram.

Fourth Method (Biplane fluoroscope and Cross[23] forceps for removal of lead shot) : I have had no personal experience with this method, because of the lack of a

biplane fluoroscope. In the hands of Cross, with the aid of his fluoroscopist, the method has proved successful in several cases.

Scleral Foreign Bodies.—Generally, if they do not penetrate into the globe, scleral foreign bodies may be allowed to remain undisturbed. Should removal be necessary, however, an accurate localization with careful plotting comes first, followed by gradual cutting down on the indicated point in the sclera. If the foreign body is not visible on the surface, it is well to palpate the site of the projected incision with the end of a muscle hook to detect the presence of a hard foreign body.

Orbital foreign bodies do not come within the scope of this paper. Most of them can remain undisturbed, unless they are large, are causing pressure on vital structures or provoking pain.

The postoperative treatment is as follows:

1. *Foreign Protein Therapy:* (a) In fresh injuries, on admission to the hospital 10 cc. of boiled milk is injected intragluteally for men, 8 cc. for women and appropriate lesser doses for children. Twenty million units of typhoid antigen A given intravenously, may be substituted for the 10 cc. of milk and in corresponding amounts for lesser doses. This may be repeated every third or fourth day for four to six doses. The typhoid antigen dosage is increased 20 to 40 to 60 million, and so on as required. (b) For older injuries the foreign protein therapy, administered within six hours after the intraocular operation, is recommended.

2. *Sulfonamides:* Sulfadiazine is employed. In cases of fresh injury an initial dose of 2 Gm. is followed by 1 Gm. every four hours for twenty-four to forty-eight hours. Thereafter 1 Gm. is administered every six hours for two to three days. The dosage is computed at 0.1 Gm. per kilogram of body weight. The blood cell count (red and white) and urinalysis are performed every forty-eight hours during sulfonamide medication. The sulfadiazine blood level is also watched.

3. *ACTH: Corticotropin* (ACTH), 25 to 40 units in 500 cc. of 0.5 per cent dextrose solution, is administered intravenously at a rate of 20 minims per minute for one to three days to decongest and "cool" a markedly irritated eye.

4. *Position in Bed:* The patient is usually kept flat in bed for forty-eight hours for all wounds of the cornea. Scleral wounds or incisions require absolute rest for six to seven days. Incisions or wounds in the lower part of the globe require rest in the supine position for three or four days longer.

5. *Atropine:* This drug is used (after checking tension) in all cases except those involving foreign bodies in the anterior chamber or projecting from the cornea into the anterior chamber. However, it is used routinely after the operation in all cases of foreign body except when a primary glaucoma is present and contraindicates its use.

6. *Dressings:* Dressings every other day are routine except in cases of traumatic cataract or traumatic iritis, in which they are done daily for mydriatic instillation.

7. *Visual Aids:* Stenopaic Lindner spectacles are used for eight to sixteen weeks by all patients with transcleral wounds posterior to the ora serrata.

Sympathetic Ophthalmia.—Every penetrating ocular injury should be watched for a year or longer for early evidences of sympathetic ophthalmia. This means careful slit lamp and ophthalmoscopic examination of both eyes at frequent and regular intervals. The use of foreign proteins, corticotropin and cortisone, aspesis, the sulfonamide drugs and careful excision of prolapsed uveal tissue have caused a definite reduction in the incidence of this

dread disease. One must constantly be on the lookout for all the clinical evidences. Enucleation should not be delayed in the hope of saving a severely mutilated or hopelessly damaged globe when sympathetic ophthalmia is a probability. One should remember that the slit lamp gives reasonably early warning of developing sympathetic disease.

CONCLUSIONS

Chemically inert intraocular foreign bodies need not be disturbed unless they produce mechanical irritation. They sometimes cause glaucoma.

Differentiation of magnetic from nonmagnetic foreign bodies can be aided by the history of the injury, examination of the tools employed and use of the Berman locator, as well as by examination of fragments from the face or other exposed parts of the body in cases of explosion. The use of the magnet for diagnosis is bad practice and should be deprecated.

A simple roentgen ray technic is afforded by the Vogt and Comberg methods. A modified Comberg lens, as described, offers more certain localization and enables one to avoid pitfalls.

Stereoscopic roentgen films with a localizing shell give a tridimensional concept of the position of the foreign body. When combined with air injection in Tenon's space, they help in diagnosing double perforations.

Multiple intraocular foreign bodies, when they exceed three, suggest conservative therapy for the time being.

One must avoid mutilating a globe simply for the sake of removing a foreign body that may be inert.

Retinal detachment must be properly and promptly treated.

Prompt removal of intraocular foreign bodies is important.

In using the ophthalmic endoscope, one must practice on numerous animal eyes to master the technic. Properly used, the endoscope is a valuable aid in saving a potentially lost eye from a retained nonmagnetic foreign body.

One should never grope in the vitreous with any instrument.

Infections must be prevented and treated by asepsis, assurance of patency of the lacrimal passages, foreign proteins and sulfonamide drugs.

Foci of infection should not be overlooked as factors in delayed healing and complications, such as uveitis.

The typical use of 1:100 epinephrine and thromboplastin helps to check oozing hemorrhage.

Removal of an injured eye is indicated only when it is collapsed or extensive loss of vitreous has taken place and light perception is gone.

Corneal and scleral lacerations heal earlier and better when sutured. In addition to suturing, the wound may also be covered by a conjunctival flap.

One should remember to examine carefully the fellow eye at the first and subsequent visits: It may harbor a foreign body from the same or a previous accident. Both eyes should be watched routinely with the slit lamp and ophthalmoscope.

Sympathetic ophthalmia should be kept in mind in every case of perforation.

ZUSAMMENFASSUNG

Chemisch inaktive Fremdkörper im Auge können unberührt belassen werden, solange sie keine mechanische Reizung hervorrufen. Manchmal verursachen sie ein Glaukom.

Zur Unterscheidung magnetischer Fremdkörper von nicht magnetischen kann die Geschichte der Verletzung und eine Untersuchung der benützten Werkzeuge ebenso wie die Anwendung des Bermanschen Lokalisierapparates und die Untersu-

chung von Bruchstückchen im Gesicht oder an anderen ausgesetzten Körperstellen in Fällen von Explosionen beitragen. Die Anwendung des Magneten zu diagnostischen Zwecken ist ein schlechtes Verfahren und sollte zurückgewiesen werden.

Vogt und Comberg haben ein einfaches Röntgenverfahren angegeben. Eine von Comberg beschriebene Linse bietet eine sicherere Methode der Lokalisierung, mit deren Hilfe sich Irrtumsquellen vermeiden lassen.

Stereoskopische Röntgenaufnahmen unter Verwendung einer lokalisierenden Hülse ergeben ein dreidimensionales Bild von der Lage des Fremdkörpers. In Verbindung mit Lufteinblasungen in den Tenonschen Raum tragen sie zur Erkennung von Doppelperforationen bei.

Das Vorhandensein von mehr als drei Fremdkörpern im Innern des Augapfels lässt eine zunächst konservative Behandlung ratsam erscheinen.

Die Verstümmelung eines Augapfels lediglich um den Preis der Entfernung eines Fremdkörpers, der vielleicht inaktiv ist, muss vermieden werden.

Netzhautablösungen müssen sorgfältig und unverzüglich behandelt werden.

Die sofortige Entfernung intraokulärer Fremdkörper ist wichtig. Die Benützung des Augenendoskops erfordert zur Beherrschung der Technik Übung an zahlreichen Tieraugen. Bei richtiger Anwendung kann das Endoskop zur Erhaltung eines Auges, das sonst vielleicht infolge eines zurückgebliebenen nicht magnetischen Fremdkörpers aufgegeben werden muss, von Wert sein.

Niemals sollte mit irgendeinem Instrument im Glaskörper herumgetastet werden.

Infektionen sind durch Asepsis, Sicherung eines freien Tränenabflusses und durch die Verabreichung von körperfremdem Eiweiss und Sulfonamiden zu verhüten und zu behandeln.

Infektionsherde, die zur Verzögerung der Heilung und zum Auftreten von Komplikationen beitragen können, wie z.B. zur Entstehung einer Uveitis, sollten nicht übersehen werden.

Die örtliche Anwendung einer einprozentigen Adrenalinlösung und von Thrombokinase ist zur Kontrollierung sickernder Blutungen von Nutzen.

Eine Indikation zur Entfernung eines verletzten Auges liegt nur dann vor, wenn ein Kollaps oder ein schwerer Verlust von Glaskörperflüssigkeit eingetreten und Lichtempfindlichkeit verloren gegangen ist.

Horn-und Lederhautrisse heilen schneller und besser, wenn sie genäht werden. Ausser der Naht kann die Wunde durch einen Bindehautlappen gedeckt werden.

Man sollte nicht vergessen, sowohl bei der ersten als auch bei späteren Konsultationen auch das andere Auge sorgfältig zu untersuchen, da auch dieses einen von dem gleichen Unfall herstammenden Fremdkörper beherbergen mag, Beide Augen müssen routinemässig mit der Spaltlampe und dem Ophthalmoskop beobachtet werden.

Bei jedem Fall einer Perforation ist an die Möglichkeit der sympathischen Ophthalmie zu denken.

RIASSUNTO

I corpi estranei endooculari non hanno nessuna necessità di essere rimossi quando sono chimicamente inerti e non producono irritazione meccanica. Essi, tuttavia, possono causare un glaucoma.

Per decidere se essi siano magnetici oppure no, giova conoscere la storia del trauma, sapere quali strumenti siano stati usati, e ci si può servire del localizzatore di Berman come pure dell'esame di eventuali altri frammenti ritenuti in altre parti del corpo più accessibili e dovuti allo stesso incidente. E' assolutamente sconsigliabile l'uso del magnete.

Vogt e Comberg si servono di un semplice esame radiologico, mentre una lente di Comberg modificata secondo uno schema descritto in questo lavoro consente una localizzazione più precisa ed evita insuccessi.

Gli esami radiologici stereoscopici forniscono una localizzazione tridimensionale del corpo estraneo e possono anche permettere la diagnosi di perforazione doppia quando vi si associ l'insufflazione di aria nello spazio di Tenone.

Allo stato attuale, corpi estranei in numero maggiore di tre impongono la terapia conservativa.

Bisogna, inoltre, evitare ogni mutilazione al globo oculare nel solo intento di allontanare un corpo estraneo che potrebbe anche essere inerte.

I distacchi di retina devono essere curati in maniera adatta e prontamente.

Quanto all'uso dell'oftalmoscopia endoscopica, è necessario impadronirsi della tecnica con ripetute prove su occhi di animali. L'endoscopia, in mani esperte, può salvare occhi condannati per la presenza di corpi estranei non magnetici.

Non si deve mai, e con alcun instrumento, andare a tentoni nel vitreo.

Le infezioni devono essere prevenute e curate con la asepsi, con l'assicurarsi della pervietà dei dotti lacrimali, con la proteinoterapia e con i sulfamidici.

Eventuali focolai di infezione, come un'uveite, devono essere tenuti in considerazione come causa di ritardata guarigione o di complicazioni.

L'emorragia può essere controllata mediante l'impiego di adrenalina e di tromboplastina.

L'enucleazione di un occhio offeso è indicata solo nei casi in cui esso è collassato, o quando vi sia stata una perdita importante di vitreo o quando si è perduta la percezione della luce.

Le lacerazioni corneali e sclerali guariscono bene e più rapidamente se vengono suturate. La sutura può venire ricoperta da un lembo congiuntivale.

Bisogna ricordarsi di esaminare l'occhio adelfo cura ad ogni visita successiva, perchè può ospitare anch'esso un corpo estraneo dovuto allo stesso accidente o ad uno precedente. Entrambi gli occhi devono essere esaminati sistematicamente con la lampada a fessura e con l'oftalmoscopio.

In ogni caso di perforazione deve essere tenuta presente l'oftalmia simpatica.

RÉSUMÉ

Des corps étrangers qui n'irritent pas chimiquement devraient être laissés en repos, pourvu qu'ils n'irritent pas mécaniquement. Quelques fois ils produisent le Glaucome.

La distinction des corps étrangers magnétiques et non magnétiques peut être facilitée par l'histoire de l'accident, examen des utils employés, par l'usage du locateur Derman et par l'examen des fragments dans le visage ou d'autres parties exposées en cas d'explosion. L'usage de l'aimant pour la diagnose est une mauvaise pratique qui devait être abandonnée.

Une simple pratique de Rayons-X est accomplie par les méthodes de Vogt et Comberg. Une lentille Comberg modifiée est décrite qui offre une localisation certaine et évite tromperie.

Des films stéreoscopiques a l'aide d'un obus localisant donnent une position tridimensionale de la sorte du corps etranger. Combinés avec injection d'air dans l'espace de Tenon ils aident a faire la diagnose des perforations doubles.

En cas de multiples corps etrangers, s'il y en a plus que 3, on recommande la thérapie conservative en attendant.

Il faut éviter une mutilation du globe pour une simple extraction d'un corps étranger qui pour ait être non irritant.

Le détachement de la rétine devait être traite soigneusement et promtement.

Dans l'usage de l'endoscope ophthalmique on doit exercer à beaucoup de yeux d'animals, afin de maitriser la technique. L'endoscope bien employé est un aide valable qui peut conserver un ceil eventuellement perdu a cause d'un corps étranger non magnétique qui est retenu.

On ne devait jamais fouiller dans le vitreus avec n'importe quel instrument.

Des infections devaient être évitees et traitées par asepsis, assurance d'intégrité des passages lacrymaux des protéines étrangers et les sulfonamides.

Des foyers d'infection ne doivent pas être négligés comme facteurs retardants de guerison et uveitis.

L'emploi topique d'epinephrine 1:100 et de Thromboplastine aident arrêter la transsudation de sang.

L'exstirpation d'un oeil blessé est seulement indiquée en cas de collapse où après une perte considócrable du vitreus et que la perception de lumière est zéro.

Les lacérations de la cornée et de la scléra guérissent mieux et plus, s'is sont cousues. Ensuite la plaie pourrait être couverte d'un morceau de conjonctive.

On doit se souvenir d'examiner l'autre oeil à chaque visite: Il pourrait contenir un corps étranger à la suite du même accident ou d'un accident précédant. Touts les deux yeux doivent être examinés regulièrement à l'aide de l'ophthalmoscope.

L'ophthalmie sympathique doit être considérée en chaque cas de perforation.

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Management of Obstruction of the Lacrimal Duct

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THIS paper is a summary of my experience with lacrimal duct obstruction. "The Management of Epiphora and Lacrimation" would probably be a better title, because lacrimation often occurs without any ductal obstruction. If lacrimation or epiphora is to be relieved, the cause must be determined. Lacrimal duct obstruction in infants is not at all like the same condition in adults. One is easily cured; the other may be extremely obstinate.

The lacrimal passages develop from an epithelial cord that extends from the eye toward the inferior meatus of the nose. A thickening of the ectoderm first appears in the nasoptic fissure of the 9 mm. embryo. This buries itself in the mesenchyme to form the epithelial anlage of the lacrimal duct, sac and canaliculi. In the early fetal stage the lumen of the cord begins in segments, the upper ocular end developing first, while the lower nasal canalization accounts for the frequent valves, the uneven lumen, and the distention and irregular contour of the mature lacrimal duct. In over 75 per cent of infants the lower end of the duct, although in contact with the nasal mucosa, is not patent into the nose but has a membrane over its lower end which separates its lumen from the nose. In about 5 per cent of infants, dacryocystitis occurs because the duct does not become patent into the nose. The nasal opening under the inferior turbinate is variable. It may be wide and patent, teatlike, slitlike, multiple, located close to the floor of the nose or appearing near the inferior turbinate attachment. These factors—the irregular segmentation, the distention of an impatent duct, and the location and shape of the nasal orifice—all influence drainage or obstruction of the lacrimal passage.

For infants, I advocate the establishment of a patent lumen into the nose instead of prolonged massage of the lacrimal sac. The infants who are brought to me have usually had several weeks or months of conservative treatment by the family physician, pediatrician and parents. Even if they are very young, they have almost invariably been treated for some time for excessive tearing or purulent infection of the sac, at least long enough to cause the pediatrician and the family to seek its relief. I use 23-gauge straight 1 inch (2.5 cm.) cannula attached to a 2 cc. syringe filled with sterile physiologic solution of sodium chloride and, without general anesthesia, probe the punctum, wash the sac and if it is obstructed, using the cannula as a probe, rupture the membrane over the lower end of the duct. Some of the saline solution is forced into the nose, so that the child swallows or sneezes when the lower end of the duct becomes patent. I have observed no untoward effect from this treatment and have had no subsequent trouble with these infants. In some children, in whom the obstruction was allowed to persist for several months, so that the sac was dis-

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tended and had lost its elasticity, dacryocystorhinostomy was necessary to cure chronic dacryocystitis.

In children past 1 year of age, congenital developmental defects of the lacrimal passages may have caused chronic dacryocystitis. Prolonged distention of the sac from delayed or conservative management may lead to chronic infection in both children and adults. Trauma or laceration of the canaliculi, sac or duct, either from false passage probing or accidental contusion or lacerations, may cause dacryocystitis in children. Allergic rhinitis, sinus infection or hypertrophic rhinitis may result in chronic dacryocystitis. The same treatment is used for children as for adults: probing, attention to the etiologic factors and, if necessary, dacryocystorhinostomy, which is indicated when probing and local treatment are not successful.

For adults, one should take time before starting too vigorous a campaign of clearing up excessive watering of the eyes to determine whether one is actually dealing with obstruction of the lacrimal duct. One must first determine whether it may not be an excessive tearing, lacrimation or hypersecretion. The causes of excessive tearing may be (1) sensitivity to cold or other allergy; (2) trichiasis, with or without entropion; (3) an everted punctum from ectropion (senile, traumatic or paralytic); (4) corneal or conjunctival irritation; (5) sinus disease; (6) allergic rhinitis; (7) refractive errors; (8) disease of the retina or uveal tract; (9) emotional factors, or (10) abnormal hydrogen ion concentration (pH.) of tears. In other words, before assuming that the excessive watering of the eyes is due to lacrimal duct obstruction, one should first make sure that it is not from some of the above factors and is an excessive tearing rather than a defect in lacrimal drainage.

In adults, obstruction of the lacrimal duct, epiphora or a defect in drainage is much more difficult to manage than it is in children. It is about four or five times as frequent in women as in men. The symptoms are variable, in some cases mild and in others stormy, but the prognosis is not in proportion to either its course or its duration. In one patient, mild obstruction of short duration may not respond to probing, while in another, with purulent dacryocystitis of long duration, it may clear up after a single irrigation and the use of an antibiotic.

In starting treatment of duct obstruction one must decide first whether the obstruction is in the punctum, the canaliculi, the sac, the duct or the nose and when and how it first started.

Punctal obstruction may result from congenital absence, or narrowing, a foreign body, an eyelash, eversion of the punctum, slitting of the punctum, chemical or radiologic burn or trauma. Canalicular obstruction may be due to congenital anomalies, foreign bodies, concretions, fungus infections, chemical constriction (furmethide), trauma (false passage probing), laceration or roentgen burns of the mucosa. It may involve the entire canaliculus as it is in furmethide burn or it may be at the junction of the two canaliculi where they join the sac.

Obstruction of the lacrimal sac may be a congenital anomaly or may occur as a result of prolonged distention due to infection, with loss of its elasticity. Sac obstruction may be due to concretions or to injury to the sac. Lacrimal duct obstructions sometimes occur at the nasal orifice, but more frequently they are located at the isthmus of the duct where it leaves the sac and enters the bony canal. Strictures of the duct may be single or multiple. They may be congenital anomalies or due to sinus disease, such as anterior ethmoiditis. Duct obstruction may also fol-

low trauma from probing, accident or nasal surgical maneuvers.

After the history has been taken and a careful preliminary examination made, the lacrimal passages are washed out. Topical anesthesia is used, and the punctum, if patent, is dilated with a punctum dilator. A 4 per cent solution of cocaine is injected into the canaliculus for anesthesia. A straight 1 inch 23 gauge lacrimal cannula is used for the irrigation. If the solution passes readily through the passages into the nose it is patent but if it returns through the upper canaliculus, the canaliculi are both patent but there is an obstruction in the sac or duct. A narrow constricted canaliculus is found after chemical or roentgen burns and also at times in cases of congenital narrowing. If the sac contains pus, the purulent secretion, when irrigated through one canaliculus, will be forced out of the other canaliculus into the corner of the eye. When the sac is chronically distended and diseased, the distention of the sac can often be palpated because the obstruction is below the sac. After the sac has been washed, cocaine may be instilled into it to aid in probing the duct. A Bowman No. 0 or No. 1 probe is passed into the nose and left in the nasolacrimal duct for several minutes. A larger No. 2 or No. 3 probe is then used, after which the sac and duct are again irrigated to free them from clots and to make sure that a lumen into the nose is patent.

At the next visit, a week later, the irrigation is repeated, and, as often occurs even though a No. 3 or No. 4 probe has been passed easily before, there is often complete lacrimal duct obstruction again, and the sac is distended with mucopurulent material. Probing is again done, followed by irrigation, and the patient is requested to return in a week. If after two or three such probings the obstruction is still present (as it often is), dacryocystorhinostomy is advised. Of course, tuberculosis, cancer, extreme age or inanition are contraindications, and dacryocystectomy in such cases would be preferable.

I use the Dupuy-Dutemps dacryocystorhinostomy, in which the posterior and anterior flaps of the sac and the nasal mucosa are sutured together to create a patent lumen between the sac and the nasal cavity. I have used the Toti-Mosher procedure, the West operation and Gifford's method of pulling the lower end of the sac through the nasal opening, but my difficulty has been that the bony opening into the nose would become smaller or close and drainage through it would not continue.

I expose the sac and the lacrimal fossa and with the Strycker lacrimal trephine make a fairly large opening through the lacrimal crest into the nose. The Strycker saw, if properly used, precludes any injury to the nasal mucous membrane. An I-shaped incision is made in the nasal mucosa exposed in the window, and a similar I-shaped incision is made in the posterior abutting side of the lacrimal sac after the nasal opening has been enlarged with rongeurs so that it is as large as possible and extends down as far as the upper end of the bony canal of the lacrimal duct.

The posterior flaps of the sac and nasal mucosa are sutured together at the lower and upper ends with a small Davis & Geck No. C 267 needle with a No. 3-0 double-armed suture. In this very deep hole one small needle is able to pick up the nasal mucosa, and the other needle picks up the posterior flap of the lacrimal sac, without tearing either. Two or three sutures are put into the posterior flaps and at least one at the upper and lower ends to make a mucosal bridge over the posterior edge of the trephined bone. Then the anterior flaps of the sac and the nasal mucosa are sutured together to provide a lumen for the collapsed sac. The periosteum as well

as the mucosa is picked up at the upper and lower ends of the bony opening to hold the lumen forward. After the anterior flaps have been sutured together the sutures may be brought out through the skin and tied over a gauze square to hold the anterior flaps forward, thus preventing a collapse of the lumen. The skin is sutured with interrupted silk, and a pressure dressing is applied.

My results with dacryocystorhinostomy have not been startling. It is a difficult, tedious operation in anyone's hands, but if the nasal opening is large, if the anterior flaps are held up to keep a lumen, and if early irrigation of the sac is done to free it from clots and detritus, it is fairly successful. The bleeding is controlled with epinephrine packs. Anesthesia is local, fortified with morphine and hyoscine.

I do not perform many of these operations—two to six in a year. I have had 50 per cent of excellent results, 25 per cent of fair results and 25 per cent varying from poor to failure. When the passages fail to stay open, I have put in polyethylene tubes. In 2 of the 4 cases, in which I used the polyethylene tubes the opening closed after removal of the tube and dacryocystectomy was required. I have also done the Dupuy-Dutemps dacryocystorhinostomy in small children. The technic is the same as for adults and the operation no more difficult.

SUMMARY

The author urges early treatment of dacryocystitis, and probing if necessary in infants. One should not temporize till chronic dacryocystitis occurs. An understanding of the developmental anatomy of the lacrimal passages explains many of the anamolies and obstructions encountered later in life. A thorough study of the causes of excessive tears should be made before obstruction of the lacrimal duct is diagnosed; then an accurate history of the onset, and the cause and progress of the epiphora should be obtained before treatment is begun. The site of the obstruction is determined and appropriate therapy undertaken. Probing is not usually successful in relieving ductal obstruction in adults, and dacryocystorhinostomy is advocated when conservative management fails.

RIASSUNTO

L'Autore raccomanda la cura precoce della dacriocistite, specialmente nei bambini, senza attendere la comparsa della dacriocistite cronica. La conoscenza dello sviluppo anatomico del dotto lacrimale spiega molte delle affezioni che si producono nel corso della vita. E'necessario uno studio accurato delle cause di una lacrimazione eccessiva prima di porre la diagnosi di ostruzione del dotto lacrimale; quindi si devono raccogliere tutti i data sulla insorgenza, sulla causa e aul decorso dell'epifora prima di iniziare la cura. Si precisa la sede dell'occlusione e si intraprende la terapia adatta. Il cateterismo non è sempre efficace negli adulti; quando la cura conservativa sia fallita si deve ricorrere alla dacriocistorinostomia.

ZUSAMMENFASSUNG

Der Verfasser rät dringend zu einer frühen Behandlung der Tränensackentzündung und, wenn nötig, zur Sondierung beim Kleinkind. Man sollte keine Zeit verschwenden, bis es schliesslich zu einer chronischen Tränensackentzündung kommt. Die Kenntnis der anatomischen Entwicklung der Tränenwege trägt viel zur Erklärung von Anomalien und Verstopfungen der Tränengänge im späteren Leben bei. Ehe die Dagnose einer Verstopfung des Tränenganges gestellt wird, sollten die Ursachen übermässigen Tränenflusses sorgfältig untersucht werden. Vor Einsetzen der Behandlung sollte eine genaue Krankheitsgeschichte mit Hinsicht

auf den Beginn, die Ursache und das Fortschreiten des Tränenflusses erhoben werden. Nach Feststellung des Sitzes der Verstopfung ist die geeignete Behandlung einzuleiten. Bei Erwachsenen versagt im allgemeinen die Sondierung in der Behandlung von Tränengangsverstopfung. Wenn die konservative Behandlung nicht zum Ziele führt, wird das Anlegen einer Tränen-Nasenfistel empfohlen.

RÉSUMÉ

L'auteur préconise le traitement précoce de la dacryocystite, examinant s'il est nécessaire chez les enfants. On ne devrait pas temporiser jusqu'à l'apparition de la dacryocystite chronique. La compréhension de l'évolution anatomique des passages lacrymaux, explique maintes anomalies et obstructions rencontrées plus tard au cours de la vie. Une étude approfondie des causes de larmoiement devrait être faite avant de diagnostiquer une obstruction du canal lacrymal; ensuite, avant de commencer le traitement, on devrait obtenir un historique correct du début, la cause et l'évolution de l'épiphora. On détermine l'endroit de l'obstruction et la thérapeutique appropriée est entreprise. Le sondage, habituellement, n'est pas efficace pour soulager l'obstruction du canal chez l'adulte, et la dacryocystorhinostomie est recommandée en l'absence de traitement conservateur.

RESUMEN

El autor señala el tratamiento precoz de la dacriocistitis y la cateterización necesaria en niños. No debe de permitirse la ocurrencia de dacriocistitis crónica. Un entendimiento del desarrollo anatómico de las vias lacrimales explica muchas de las anomalías y obstrucciones que se encuentran posteriormente en la vida. Un estudio de las causas de lacrimación excesiva debe hacerse antes de que se diagnostique una obstrucción del conducto lacrimal; así pues, debe obtenerse una historia cuidadosa del comienzo, causa y progreso de la epífora, antes de empezarse el tratamiento. Se determina el sitio de la obstrucción y se lleva a cabo la terapéutica asociada. Generalmente en los adultos la cateterización no tiene éxito para aliviar la obstrucción, se preconiza la dacriocistorinostomía cuando falla el tratamiento conservador.

SUMARIO

O autor recomenda o tratamento precoce de dacriocistite, com sonda, se necessário, em lactentes. Não se deve contemporizar até que ocorra dacriocistite crônica. O conhecimento da anatomia e desenvolvimento das vias lacrimais explica muitas das anomalias e obstruções encontradas posteriormente. Antes de se fazer o diagnóstico de obstrução do ducto lacrimal, deve ser feito um estudo completo das causas do lacrimejamento excessivo; a seguir deve ser obtida uma história acurado do inicio, causa e evolução de epifora, antes de ser iniciado o tratamento. Determina-se o local de obstrução e empreende-se o tratamento adequado. Em geral a sondagem não dá resultado para promover a desobstrução dos ductos em adultos, sendo preconizada a dacriocistorinostomia quando o tratamento conservador falha.

Axis Traction Cataract Extraction with Vacuum

OSCAR B. NUGENT, M.D., F.A.C.S., F.I.C.S.,
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MUCH has been said and written about the removal of a cataract since the first extraction was described by Daviel, and one may ask, "Can there be enough change in the technic to warrant the writing of another paper on the subject?" In our opinion, sometimes even a very slight change in the technic is of great value and may mean the difference between success and failure.

As time goes on, slight changes are made and often found to have value; they then become incorporated in the regular technic, and in the course of a few years the whole technic has an entirely new form. On several occasions, doctors who formerly attended our surgical clinic have remarked how much our technic had changed, while we had scarcely noticed it.

This paper has to do with the technic we now employ, with which we have obtained our best results. By "best results" we mean reduction in the incidence of iris adhesions to the wound; iris incarceration and prolapse; reduction in the incidence of hyphemia; a greater increase in the number of round pupils; reduction of postoperative astigmatism, and the attainment of better visual results. We have also been able, as a result of our technic and experience, to reduce the incidence of such operative complications as loss of vitreous and broken capsules.

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Preliminary Preparation.—A complete history of past illnesses is obtained from the patient and from the family doctor, as well as an account of the present state of health. The physician in attendance is asked to make a physical examination of the heart, lungs, kidneys, etc. Urinalysis and a complete blood examination are made. Roentgenograms of the teeth and sinuses are obtained. The whole procedure is explained to the patient—how long he must remain in bed, the extent of pain and discomfort he must expect during the surgical procedures and convalescence. All his financial obligations are arranged before operation is attempted.

It is our experience that patients do better when all the worry and uncertainty have been reduced as much as possible. All the preliminaries are attended to from one to three days prior to the operation.

In all cases the patient enters the hospital on the day before the day set for surgical intervention. A light but nourishing meal is served about 5 p.m. If necessary the patient is given an enema, and a mild sedative is administered at bedtime. Little or no company is allowed during the evening preceding the day of operation. At bedtime homatropine is instilled into the eye to be operated on. All efforts are made by the night nurses to keep the patient quiet and to encourage sleep.

Morning of Operation.—Neosynephrin (10 per cent) is instilled, beginning about two hours before the operation and repeated every half hour. The patient is given a light breakfast of tea and toast and 5 gr.

of barbital is administered about half an hour before the operation. The patient is transfered to the operating room in a wheel chair and placed on the operating table. Pontocaine (0.5 per cent) is instilled in the eye every five minutes for four instillations. The eyelashes are cut, and the face is washed with soap and water and painted with 3 per cent iodine solution neutralized with 70 per cent alcohol.

The patient is draped and the local anesthetic is injected as follows: 1 or 2 drops of 2 per cent procaine hydrochloride is injected with a ½-inch, 25-gauge needle, first into the conjunctiva over the superior rectus muscle, about 10 mm. above the limbus, for anesthesia during the placing of the super-rectus bridle suture, also in the skin of the upper and lower lid, near the lid margin, at the center of the lid at the point where the lid sutures are to be placed. Another is placed at a point in the lower lid about 5 mm. below and to the nasal side of the external canthus, where the needle is inserted for the retrobulbar injection, and 1 in the skin 10 mm. to the temporal side of the external canthus and on a level with it, to accommodate the large needle for the Van Lint akinesis.

A retrobulbar injection of 3 cc. of a 2 per cent solution of procaine hydrochloride is made, and Van Lints akinesia is induced by injecting 6 cc. of a 2 per cent solution of procaine hydrochloride along the trunk of the seventh nerve and 3 cc. above and 3 cc. below the edge of the orbit. The superior rectus bridle suture is now put in place. The operating cloth is put in place after the lid sutures are put in. The

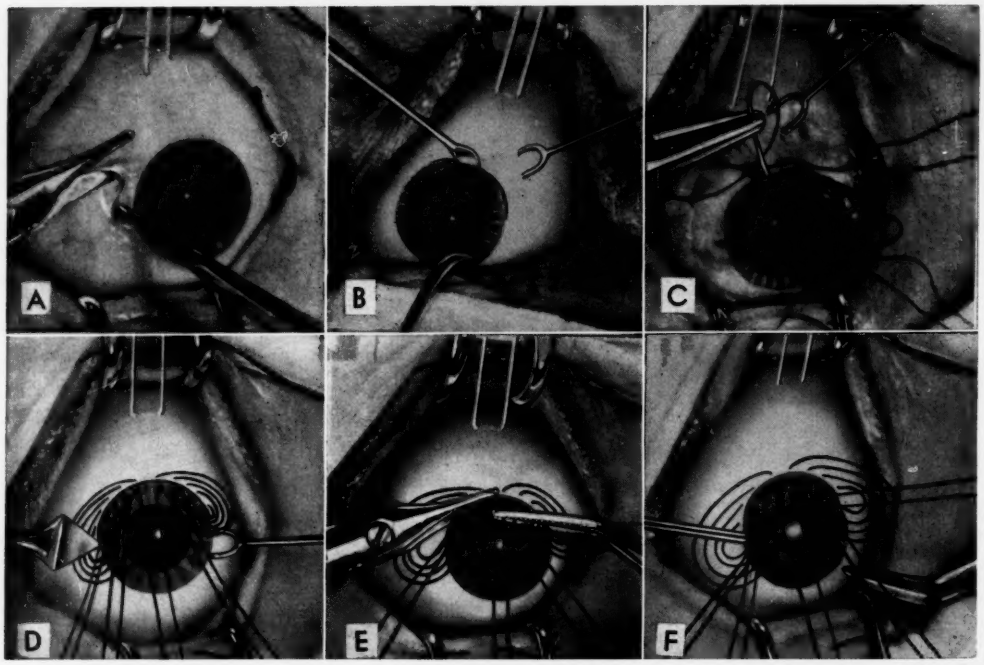

Fig. 1.—*A*, making conjunctival flap. *B*, cutting groove at limbus. *C*, placing sclerocorneal sutures. *D*, making initial incision with keratome. *E*, completing incision with scissors. Sutures are held with utility forceps to prevent cutting. *F*, placing vacuum cup on lens in center of pupil.

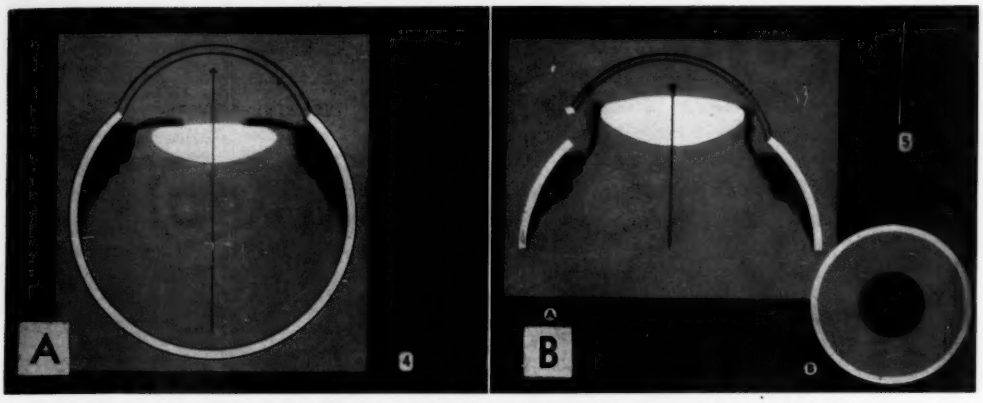

Fig. 2.—*A*, making traction in visual axis. *B*, line of traction, with resulting pupil.

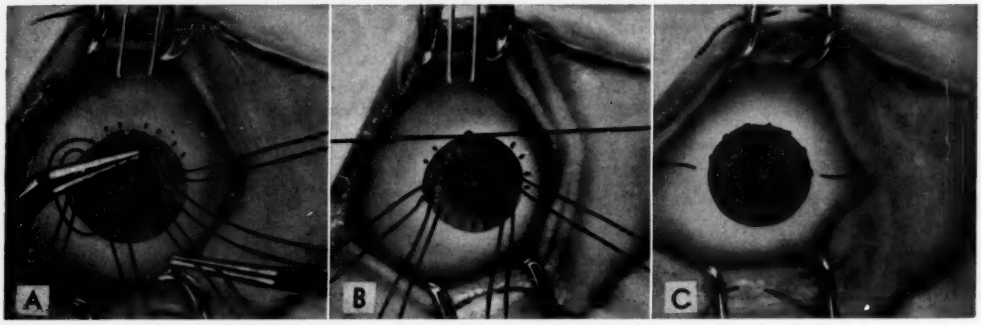

Fig. 3.—*A*, drawing up sutures with utility forceps while corneal flap is held in position by second utility forceps. *B*, tying first suture. *C*, completed operation after suturing of conjunctival flap.

lids are held with Fisher lid speculums by a trained assistant.

Irrigation of the conjunctival sac is then done, sterile distilled water being used.

Operation.—A conjunctival flap is made about 2.5 mm. from the limbus and parallel to it from 9 to 3 o'clock above. The flap is dissected down to the limbus, and a groove is made in the sclera as near to the base of the flap as is possible.

Sutures.—Five sclerocorneal mattress sutures (No. 7-0) are placed in the following manner; the mattress sutures are placed at 10, 11, 12, 1 and 2 o'clock as follows: beginning on the corneal side of the conjunctival flap at a point corresponding to 9:45 o'clock, a (No. 7-0) silk suture is inserted into the cornea near the flap, flap and out in the corneal edge of the passed under the base of the conjunctival groove.

It is carried up to a point about 2 mm. above the groove and placed in the sclera parallel to the limbus from a point corresponding to 9:45 and brought out at a point corresponding to 10:15 o'clock; it is then passed back under the conjunctival flap at 10:15 o'clock, entering the corneal side of the groove and coming out in the cornea. The same procedure is done at 10:45 and 11:15 o'clock, and also at 12, 1 and 2 o'clock.

Incision.—The incision is started by using a small keratome at a point between 9 and 10 o'clock and is finished with corneoscleral scissors. While the assistant lifts the corneal flap, the surgeon grasps the edge of the iris at 12 o'clock with the utility forceps and, while drawing it down toward the center of the pupil, makes a peripheral iridotomy at 12 o'clock, as near the limbus as possible, according to Elschnig.

Extraction.—The Nugent-Green-Dimitry vacuum cup is placed on the lens while the cornea is lifted with the utility forceps, the vacuum having previously been set to draw 42 cm., mg., and the vacuum is regulated by the oral vacuum valve. Four and one half seconds is required to build up the vacuum to 42 cm., mg., if the Nugent vacuum pump is used. The utility forceps is now closed and used as an expression instrument on the limbus at 6 o'clock. Pressure is made at this point before traction on the lens is begun. The lens is now drawn outward in the line of the visual axis, very little traction being made at the start, and as the lens is pushed forward by pressure with the utility forceps the traction is gradually increased.

In this manner the lens is pushed (expression) and pulled (traction) forward. The lens is held in this position for a few seconds, then slightly more traction is made. At this point the zonula fibers are being broken.

As soon as the lens comes up so that its edge can be seen behind the edge of the pupil, the vacuum cup is slightly tilted in such a manner as to free the upper edge of the lens so that it presents into the anterior chamber. It can then be drawn out through the incision. Broken capsules or loss of vitreous is seldom encountered.

Wound Closure.—When the lens has been delivered by the technic aforedescribed, there is seldom any need of using a spatula to replace the iris. The corneal flap is picked up with the utility forceps to free it completely from the iris.

In drawing up the loops of the sutures two utility forceps are used. One, almost closed, is placed on the cornea, with the two ends of the mattress suture pulled between the blades in order to hold the cornea in place while the sutures are being drawn up; the other forceps is used to draw up the suture. The first suture to be drawn up is the one placed at 12 o'clock and the next two are those placed at 11 and 1 o'clock after which the other two are drawn up one at a time.

All sutures are drawn up. They are then tied in the same sequence in which they were drawn up. The tie is made by using the utility forceps. The ordinary square knot is all that is necessary.

The conjunctiva is now replaced and secured by means of a running united suture. At this point the superior rectus bridle suture is removed, and a 0.5 per cent pilocarpine ointment is placed in the conjunctival sac and 5 per cent ointment of sulfadiazine over the wound. The lids are then closed and the lid suture tied; then 1 per cent yellow oxide of mercury is applied to the lids of each eye. A double patch is placed over the eyes and secured by means of Scotch tape. The operating table is wheeled to the hospital floor without transferring the patient to a stretcher, and the patient is transferred to bed.

After-Treatment.—A metal shield is placed over the surgically treated eye immediately after the patient is put to bed. The head is elevated about 20 degrees or slightly lower, as the patient desires. The patient may also be turned to the untreated side if he desires. He is kept as comfortable as possible for the next twenty-four hours, after which time the patches and the lid sutures are removed and the eye opened and inspected. Atropine ointment (1 per cent) is inserted and a patch placed over the eye that was operated on.

No patch is placed over the untreated eye. The patient can sit up and have bathroom privileges for the remainder of his stay in the hospital, which is twelve or thirteen days. The patch is removed from the eye on the seventh day but is replaced at night.

The corneoscleral and conjunctival sutures are removed on the day of the patient's discharge, and his vision with a plus 10.0 lens and a pinhole disc is recorded.

Enough patches are supplied the patient to use at night during the first week at home, and he is instructed to do no work, to wear dark glasses and to return in one week. At that time the eye is inspected and the vision is again recorded, this time with a plus 10 lens and a pinhole disc. From this time on the patient is instructed to do only a little light work and not to use the eye patches.

From four to six weeks after the operation distance glasses are prescribed. In three or four weeks more bifocals are given and the patient can resume work.

SUMMARY

Five corneoscleral (No. 7-0) sutures are used (the equivalent of ten single sutures), being placed a little less than 1.5 mm. apart. These secure the wound so that leakage is almost impossible. In addition, stresses on the wound by the extrinsic muscles, as in sudden movement or during vomiting, do not cause the wound to reopen.

The incidence of prolapse and of adhesions of the iris to the wound is reduced to a minimum. Other advantages are enumerated here, namely:

1. Hyphemia is greatly reduced.
2. A round pupil usually results.
3. Much freedom of action is given the patient during convalescence.
4. Broken capsules are almost never encountered.
5. Vitreous loss is reduced.
6. Postoperative astigmatism is greatly reduced.
7. Better visual results are obtained with a round pupil and the reduction of astigmatism.

RESUMEN

Se usan cinco suturas esclerocorneales (7.0), equivalentes a dietz suturas simples, colocándose a no menos de 1.5 mm. entre sí. Esto asegura la herida de manera que el derrame sea practicamente nulo, además el estiramiento de la herida por los músculos extrínsecos no produce dehiscencia. La incidencia de prolap so y adherencias al iris se reduce al mínimo. Otras ventajas son las siguientes:

1. Se reduce grandemente la hiperemia.
2. Se produce una pupila circular.
3. Se dá mucha libertad de acción al paciente durante la convalescencia.
4. Casi nunca se encuentran pedazos capsulares.
5. Se reduce la pérdida vítrea.
6. Se reduce grandemente el astigmatismo postoperatorio.
7. Se obtienen mejores resultados visuales con una pupila circular y con la reducción del astigmatismo.

RIASSUNTO

Vengono dati 5 punti di sutura corneosclerali (7.0), alla distanza di circa 1,5 mm. uno dall'altro. La ferita viene in tal modo garantita da un eventuale cedimento. Non si riapre in seguito a contrazione dei muscoli estrinseci come nei movimenti improvvisi o durante gli sforzi del vomito. Viene ridotta al minimo anche la possibilità di successivi prolassi o aderenze. Gli altri vontaggi sono:

1. Riduzione notevole dell'ifemia.
2. Conservazione di una pupilla rotonda.
3. Libertà di movimenti per il paziente durante la convalescenza.

4. Impossibilità di rottura della capsula.
5. Riduzione della perdita di vitreo.
6. Diminuzione dell'astigmatismo post-operatorio.
7. Migliori risultati funzionali.

RÉSUMÉ

Cinq sutures originales de la cornée et de la sclérotique (7.0) sont utilisées (équivalent à dix sutures simples), à un peu moins de 1,5 mm. les unes des autres. Celles-ci protègent la plaie de sorte que l'écoulement est presque impossible. De plus, les pressions sur la plaie par les muscles extrinsèques, un mouvement brusque ou le vomissement empêchent la plaie de se rouvrir. La fréquence du prolapsus et des adhérence de l'iris est réduite au minimum. Les autres avantages sont les suivants:

1. Hémorragie rarissime dans la chambre antérieure de l'oeil.
2. Obtention en général d'une pupille ronde.
3. Grande liberté de mouvement au malade durant la convalescence.
4. La capsule est rarement déchirée.
5. Perte réduite de l'humeur vitrée.
6. Forte diminution de l'astigmatisme post-opératoire.
7. Résultats visuels meilleurs avec pupille ronde et diminution de l'astigmatisme.

SUMARIO

Cinco suturas córneo-escleróticas (7.0) foram realizadas (o equivalente a dez suturas simples), sendo colocadas a menos de 1,5 mm. de distância. Estas mantêm a ferida, evitando a deiscência que se torna quase impossível. Além disso, tensões na ferida exercidas pelos músculos extrínsecos, como acontece nos movimentos ou durante os vômitos, não provocam a sua reabertura. A incidência de prolapso e aderência da iris são reduzidas ao mínimo. Têm ainda as vantagens seguintes:

1. A hifemia é muito reduzida.
2. Resulta em geral uma pupila redonda.
3. Maior liberdade de ação é dada ao paciente durante a convalescença.
4. Cápsulas quebradas raramente são encontradas.
5. A perda de transparência é reduzida.
6. O astigmatismo póo-operatório é muito reduzido.
7. Melhores resultados usuais são obtidos com a pupila redona e redução do astigmatismo.

ZUSAMMENFASSUNG

Der Verfasser verwendet fünf korneosklerale 7,0) Nähte (das Aequivalent von 10 Einzelnähten), die er in Abständen von etwas weniger als 1,5 mm. anlegt. Diese Nähte ergeben einen so sicheren Schluss der Wunde, dass ein Sickern fast unmöglich ist. Darüber hinaus kommt es bsi plötzlicher Beanspruchung der Wunde durch die äusseren Muskeln, z.B. bei plötzlichen Bewegungen oder beim Erbrechen, nicht zum Aufplatzen der Wunde. Das Auftreten von Prolaps und Verwachsungen der Regenbogenhaut wird auf ein Mindestmass herabgedrückt. Weitere Vorzüge sind die folgenden:

1. Hyphaema wird weitgehend herabgesetzt.
2. Gewöhnlich erzielt man eine runde Pupille.
3. Der Patient geniesst eine grosse Bewegungsfreiheit in der Rekonvaleszenz.
4. Kapselbrüche kommen fast niemals vor.
5. Das Vorkommen von Verlust der Glaskörper flüssigkeit wird verringert.
6. Das Auftreten von postoperativem Astigmatismus wird erheblich eingechränkt.
7. Bei runder Pupille und beschränktem Astigmatismus kommt es zu besserem Sehvermögen.

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The Journal of the International College of Surgeons

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Section II

Bulletin of Meetings—Announcements

National and International Activities

Vol. XXIII *January, 1955* No. 1

INTERNATIONAL COLLEGE OF SURGEONS

SCHEDULE OF MEETINGS

INTERNATIONAL—NATIONAL—REGIONAL

INTERNATIONAL

1955

May 23-26	Twentieth Anniversary Meeting	Geneva, Switzerland
Sept. 4-8	Third Congress, Brazilian Section	Belo Horizonte, Brazil

NATIONAL: UNITED STATES AND CANADIAN SECTIONS

September 12-15	Convention Hall	Philadelphia, Pennsylvania

REGIONAL

February 11-12	Statler Hotel	Washington, D.C.
February 27-March 1	Shamrock Hotel	Houston, Texas
July 1-4	Chatham Bars Inn	Cape Cod, Massachusetts
To be announced	Hotel Utah	Salt Lake City, Utah

1956 NATIONAL: UNITED STATES AND CANADIAN SECTIONS

September 9-13	Palmer House	Chicago, Illinois

1957 NATIONAL: UNITED STATES AND CANADIAN SECTIONS

September 8-12	Palmer House	Chicago, Illinois

1958 NATIONAL: UNITED STATES AND CANADIAN SECTIONS

September 7-11		Atlantic City, New Jersey

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Bulletin of Meetings — Announcements
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Section II

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Dr. Edmund A. Proby, Chicago, Illinois

Dr. Paul Emile Laflamme, Sudbury, Ontario, Canada

Evaluation of Founder's Collection of Medical Manuscripts Presented to the International Surgeons' Hall of Fame

S. R. SHAPIRO, Ph.D.

EDITOR, U. S. CUMULATIVE BOOK RECORDS; YALE LIBRARY ASSOCIATE; MEMBER OF THE LIBRARY SOCIETY OF AMERICA; MEMBER OF THE SOCIETY OF LIBRARIANS OF NEW YORK, ETC., NEW YORK, N. Y.

An enthusiastic collector of historic manuscripts in many fields, Dr. Max Thorek of Chicago has presented the entire medical and surgical section of his accumulated treasure to the International Surgeons' Hall of Fame.

In time the collection extends over four centuries; in space it covers the globe, heavily weighted in favor of Europe, the continent to which medicine owes most.

Especially rich is the British collection, which ranges from Thomas Guy, the revered founder of the great London Hospital that bears his name, to George Grey Turner, the brilliant London surgeon of the present era.

For a generation, Dr. Eli Moschocowitz, the distinguished American clinician, sought without success for a holograph letter of Dr. Richard Bright. In the Thorek collection there is one of the finest Bright letters extant. The letters and documents of Dr. Edward Jenner, the discoverer of smallpox inoculation, is exceptionally fine and extensive.

The largest group belonging to Great Britain consists of manuscripts by the great Englishwoman of the Nineteenth Century, the creator of modern nursing and modern military hospitals, Florence Nightingale. The Nightingale collection is today one of the richest private collections in America.

The most important holograph piece in the French section is a precious memorandum of Laennec, genius of thoracic therapy, inventor of the stethoscope and victim of the disease he knew so profoundly, tuberculosis. Laennec died young, and manuscript fragments of his are exceedingly rare.

The Sixteenth and Nineteenth Centuries of medicine in France are extremely well covered. Writings of Corvisart, Ricord, Magendie, Larrey (one of Dr. Thorek's prime favorites, the man Napoleon considered the most virtuous he had ever known), Dupuytren, Nelaton and a notable and extensive group of physicians and surgeons of the last half of the Nineteenth Century are included. The Louis Pasteur group is choice and extensive.

The German and Austrian group is richest in surgeons. From the great Langenback on through von Bergmann, Billroth and Bier, there is hardly a significant surgeon missing from the collection. The Virchow section is notable and includes an important manuscript of some 84 pages.

Among the Italians represented are included Malpighi, Caldani and Scarpa, all giants of Italian medicine, with an impressive group of more recent figures.

The American group begins with the first achievements of medicine in America, the Eighteenth Century period of strife and ferment. Both the Philadelphia and the Boston group are beautifully represented, with Benjamin Rush, dean of American physicians and signer of the Declaration of Independence, in the lead. There is even an early diploma of the University of Pennsylvania, signed by the giants of the early Nineteenth Century—

Rush, Physick, Wistar and their brilliant colleagues.

Mention must also be made of a most curious Eighteenth Century medical chart of French origin, showing the metaphysical and philosophic subdivisions of medicine before the birth of the scientific era.

From the dynastic wars of the period of Louis XV down to the struggles that tore the world to pieces in the Twentieth Century, there are representative pieces commemorating the triumphs of military medicine and surgery.

A study of this collection is richly rewarding, for it lays before one's eyes the whole vital process of the evolution of the art and science of medicine.

SPECIAL COURSE IN UROLOGY

Professor Dr. **Raymond Darget,** President of the Section on Urology of the International College of Surgeons, has begun a series of international réunions of urologists in Bordeaux, France, that will continue during the winter half-year. The first meeting, attended by Drs. **Bernard Fey,** F.I.C.S., of Paris, France, and **Alfonso de la Peña,** F.I.C.S., of Madrid, Spain, was very successful.

Professor **Darget** will also present a special course in Urology at the Hôpital du Tondu, Bordeaux, France, from June 6th to June 10th, following the European Congress of the Collège International des Chirurgiens in Geneva, Switzerland. This course will be conducted in two sections. Section 1 will cover the treatment of malignant tumors of the bladder including radium therapy and considering palliative treatments such as denervation of the bladder and uretero intestinal anastomosis. Section 2 will be centered around the treatment of malignant tumors of the prostate, discussing radium therapy and perineal and ischio rectal implantation of radium needles.

The course will include operations, cadaver work, lectures and the presentation of patients suffering from the aforementioned malignant neoplasms.

The number of participants admitted to the course is strictly limited, so all doctors interested are urged to write for additional information to the Collège International des Chirurgiens, 17, Rue Castéja, Bordeaux, France, as soon as possible.

President's Letter

With this issue of the Bulletin the President's Letter to the membership of the United States Section becomes a monthly feature. In these columns I shall endeavor to present brief reports of progress and at the same time reemphasize the ideals, policies and principles of the International College of Surgeons, which must be kept constantly in mind by all of us.

At the first meeting of the newly elected Council, held at the College Home on December 11, officers and members were in attendance from all sections of the country. A fascinating account of the recent world tour made by a group of eminent Fellows of the College was given by Drs. **Henry W. Meyerding** and **Max Thorek.** A hearty welcome and the most gracious hospitality were accorded them wherever they went. The creation of new Sections of the College in India, Pakistan, Hong Kong, Japan, Thailand and Greece is a highly encouraging evidence of the high regard in which the College is held.

In a message to the Council, I recounted some of my own experiences in various parts of our own country and in South America during the past year. Space does not permit more than brief mention of a few of the excellent and inspiring medical meetings I was privileged to attend: the Regional Meeting in Poughkeepsie, the Academy of Medicine in Harrisburg, Pennsylvania; a meeting of the Oklahoma Surgical Society, and meetings in Denver, Tacoma and Seattle. In both of the last-mentioned cities I met many fine young surgeons, nearly all of whom were either members of the College already or earnestly desirous of membership. It was a heartening experience to find, at every medical center I visited, so much appreciation and enthusiasm for our great organization and so many of its Fellows holding high posts in hospitals and elsewhere. Very many of them may already be numbered among the leaders of surgery in the United States; many more give certain promise of becoming leaders of the same high distinction.

My pleasure in these activities was greatly heightened by meeting a number of my most highly esteemed friends and colleagues: in Harrisburg, Pennsylvania, Dr. **Clarence Moore**; in Oklahoma City, Drs. **R. M. Howard, Leo Starry, Forrest Linkinfelter** and **Charles O'Leary**; in Omaha, Drs. **Kenneth Sawyer, Roger Anderson** and **Elmer Hess,** and in Pittsburgh, Dr. **Charles Barone.**

The response of the young Western surgeons to the appeal of an international scientific organization emphasized the importance of building up our Junior Membership. Since it is no easy task to progress from the status of a Junior Member to that of a qualified Fellow of the College, the eagerness of these young men be-

Dr. Arnold S. Jackson, F.A.C.S., F.I.C.S.

speaks their devotion to the profession they have chosen. At the Council meeting, therefore, a committee of ten eminent surgeons, headed by Dr. **Ralph Coffey** as Chairman, was appointed to plan an intensified Junior Membership program.

The same day, December 11, was chosen for a meeting of the officers of the Woman's Auxiliary under the leadership of its President, Mrs. **Walter Cleveland Burket.** This group is making a splendid contribution to the vitality and influence of the College. Among their many achievements is the establishment of a fund of several thousand dollars to effect an exchange of young European and American surgeons. The value of such an exchange at present is beyond question.

Finally, I should like to express once more my deep sense of the responsibility that devolves upon me as President of the United States Section, and no less my great obligation to the long line of distinguished surgeons whom I have the honor to succeed in that capacity. I am strongly mindful of the fact that I enter upon my official duties with the great advantage of a strong foundation prepared by the efforts of others—a debt and a challenge no man can afford to neglect. The influence of the College now circles the globe; it will be my sincere and ardent purpose first of all to maintain the high standards of science and scholarship that have brought the United States Section to its present high level of achievement, and, second, to do all in my power to strengthen the fraternal alliance of the Section with other Sections all over the world. It is no small undertaking, and I shall need all the counsel and cooperation available. I shall therefore welcome comments, suggestions and criticisms from any and all members of the College.

ARNOLD S. JACKSON, M.D.
President, United States Section

The Coordinator for all Postgraduate Courses on the European Continent is Dr. M. Arthur Kline of Vienna, Austria, Executive Secretary of the American Medical Association of Vienna. For details of available Postgraduate Courses, please address the Secretary General, International College of Surgeons, 1516 Lake Shore Drive, Chicago 10, Illinois.

Pen Portraits of Distinguished Fellows

of the

International College of Surgeons

RAFFAELE PAOLUCCI DI VALMAGGIORE, F.I.C.S. (Hon.)

Born in Rome in 1892, Dr. Raffaele Paolucci di Valmaggiore graduated from the Royal University of Naples in 1915.

In 1919 he became Assistant in the Surgical Clinic of Naples. In 1922 he went to the University of Rome, where he remained until, in 1925, he became Professor Adjoint of Pathology and Surgery at the University of Bari. In 1930 he was appointed Director of the Surgical Clinic of the University of Parma. From 1932 to 1938 he was attached to the University of Bologna, from which institution he advanced to the position he still holds as Director of the Surgical Clinic of the University of Rome.

From 1922 to 1944 Dr. Paolucci was president of the Italian Society Against Tuberculosis, and from 1930 to 1932 he was president of the International Society Against Tuberculosis. He is also a member of the Italian Society of Surgery (Pres., 1942-1946); the Académie Française de Chirurgie; the German Society of Surgery, and the Société Chirurgie de Bordeaux.

From 1941 to 1944 he served as Vice-Admiral Surgeon of the Royal Italian Navy. He has been decorated with the Gold Military Medal of Italy; the Distinguished Service Medal of the United States Navy and the Distinguished Service Cross of the British Navy. In addition, he was made a Commander of the Legion of Honor of France.

In 1924 he was elected to the Chamber of Deputies of Italy. He was elected to the Senate in 1954.

Dr. Paolucci has written more than 100 pamphlets and articles on surgery, and is the author of *Tecniche Chirurgiche* (1940). He is personal physician to His Holiness the Pope.

A sensitive man of high breeding, wide cultivation and diversified interests, Dr. Paolucci has always shown the deepest possible devotion to College ideals. He is a great-hearted man, a great surgeon and a great friend.

Prof. Dr. Raffaele Paolucci di Valmaggiore, F.I.C.S. (Hon.).

DR. CLAUDE JUDSON HUNT, D.A.B.S., F.A.C.S., F.I.C.S.

Dr. Claude Judson Hunt was born in Smith Grove, Kentucky, in 1892. After attending high school in Glendale, Kentucky, he enrolled at Bethel College, Russellville, Kentucky, receiving his A.B. degree in 1910. He attended Medical School at the University of Kansas, and the degree of Doctor of Medicine was conferred upon him in 1915. After interning at Kansas City General Hospital, Kansas City, Missouri, in 1915-1916 and at Wesley Hospital, Kansas City, 1916-1917, he registered for three months of graduate study in neurosurgery and plastic surgery at Washington University in St. Louis. In 1918 he added four months of work at the University of Montpellier, France. He also did postgraduate work at Harvard University in 1922 and at the University of Vienna in 1929.

Dr. Claude J. Hunt, F.A.C.S., F.I.C.S.

Dr. Hunt taught while serving as attendant at the Dispensary Service and held the position of Associate Professor of Surgery at the University of Kansas Medical School.

He served as Chief of the Surgical Staff at Alfred Benjamin Dispensary for several years; was Chief Surgeon at Menorah Hospital Cancer Clinic and the Kansas City General Hospital No. 1 and No. 2, and for twenty-five years has been Chief of Surgery at Research Hospital in Kansas City.

Claude J. Hunt has been active in many medical organizations both as a participating member and as an officer. He is a Fellow of the American Medical Association; the American College of Surgeons, and the International College of Surgeons. He is also a Diplomate of the American Board of Surgery. In addition, Dr. Hunt is a member of the Missouri State Medical Society; the Jackson County Medical Society; the Kansas City Surgical Society; the Kansas City Southwest Clinical Society; the Kansas City Academy of Medicine; the Western Surgical Association; the Central Surgical Association; the Southern Medical Association, and the American Association for the Study of Goiter. He is also an Honorary Member of the Rocky Mountain Radiological Society.

Dr. Hunt has published well over 50 articles and books covering a wide area of the surgical field, and is a frequent and valued contributor to the Journal.

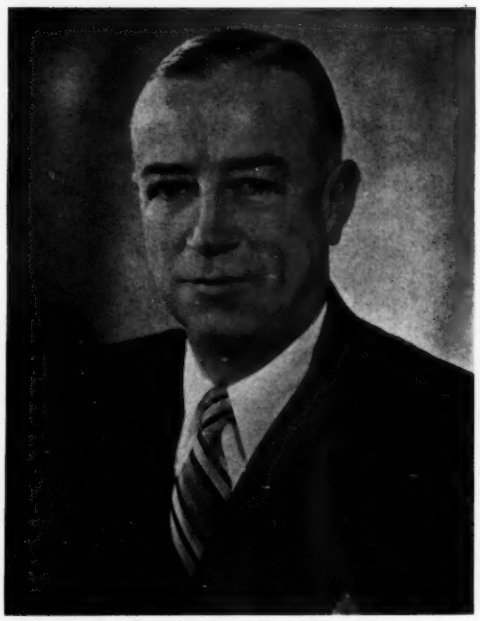
In 1947 Claude Judson Hunt was made a Fellow of the International College of Surgeons and has served the College well since becoming a member. At present he is Chairman of the Board of Trustees of the United States Section, in which capacity his work is marked by the same high integrity, both personal and professional, that distinguishes all his activities.

United States and Canadian Sections

Dr. Johnson Voted "Man of the Year"

Dr. **Robert Livingston Johnson,** who was made an Honorary Member of the International College of Surgeons at the 19th Annual Congress of the U. S. and Canadian Sections last September, received the Philadelphia Business Club's *Man of the Year* award on December 20th, 1954.

Walter D. Fuller, chairman of the board of directors of Curtis Publishing Co., presented the award "for outstanding service" as an educator, patriot and humanitarian to Dr. Johnson, president of Temple University in Philadelphia. The ceremony was held in the City Hall with Judge **Vincent A. Carroll** presiding. The Rev. **John Craig Roak,** rector of Old Swedes' Church, pronounced the invocation. Among the congratulations sent to Dr. Johnson were letters from President **Eisenhower** and U. S. Chief Justice **Earl Warren.**



Robert Livingston Johnson

Dr. Kessler Honored

The growth of interest in the development of rehabilitation services throughout the world was emphasized by **Henry H. Kessler,** M.D., F.A.C.S., F.I.C.S., in his address at the testimonial dinner given in his honor in the Delegates Dining Room at the United Nations Headquarters in New York City on December 2, 1954. Dr. Kessler, Medical Director of the Kessler Institute for Rehabilitation in West Orange, New Jersey, received the Albert Lasker Award for distinguished service to the physically disabled. This award was presented by the Lasker Foundation through the Congresses of the International Society for the Welfare of Cripples at the Sixth World Congress of the Society last September in The Hague.

Speaking on "The Disabled in the World of Tomorrow," Dr. Kessler said, "If, by the international exchange of skill, information and encouragement, we can make it possible for this interest to be translated into effective action, we will find that in the world of tomorrow a great majority of our disabled neighbors will have achieved their birthright of equal and productive citizenship."

The International Society for the Welfare of Cripples, of which Dr. Kessler is Past President, is a federation of national organizations carrying out programs for the disabled in 30 countries. With headquarters in New York City, the society conducts a world-wide program to assist in the development of rehabilitation services. It has extended help to persons and organizations in more than 50 countries during the last year. Its Sixth World Congress in The Hague was attended by nearly 700 persons from 36 countries. The

Albert Lasker Award, to be presented every third year by the Lasker Foundation, was conferred for the first time at the Sixth World Congress.

Jackson Clinic Erects New Building

The Jackson Clinic of Madison, Wisconsin, is building a new three and a half story building to house its services which have constantly increased since the day in the early 1950's when Dr. **Joseph** and Dr. **William Hobbins,** accompanied by a young man, Dr. **James A. Jackson** arrived from England to practice medicine in this frontier community.

Dr. Jackson served as surgeon with the famous Old Abe, Eighth Wisconsin Regiment during the Civil War, and returned to Madison to practice surgery for over half a century. He was recognized as one of the great pioneer surgeons in the middle west. In 1901 he was joined by his son, **Reginald,** who later became president of the Wisconsin State Medical Society and the Western Surgical Association. In 1917 Dr. **Reginald Jackson,** encouraged by his friends, the late Doctors **Mayo,** entered into partnership with his brother, Dr. **James A. Jackson, Jr.,** also an eminent surgeon, to create the Jackson Clinic. In 1921 Dr. **Arnold S. Jackson** completed his training at the Mayo Clinic and joined the new clinic group, as did another brother, Colonel **Joseph W. Jackson,** who became business director. The four brothers continued their partnership until the death of Dr. **Reginald Jackson** in 1939. Later Colonel Jackson resigned to become director of the Madison and Wisconsin Foundation.

In 1951, when Dr. **James Jackson** retired, Dr. **Arnold Jackson** became director of the clinic and chief of staff of the Methodist Hospital. Widely known as the author of medical books and scientific papers, Dr. Jackson is past president of the American Goiter Association and the Wisconsin Surgical Society and is the President of the United States Section of the International College of Surgeons. He is also an honorary member of the surgical societies of St. Paul, Rome, Bordeaux, Florence, Peru, São Paulo and Madrid.

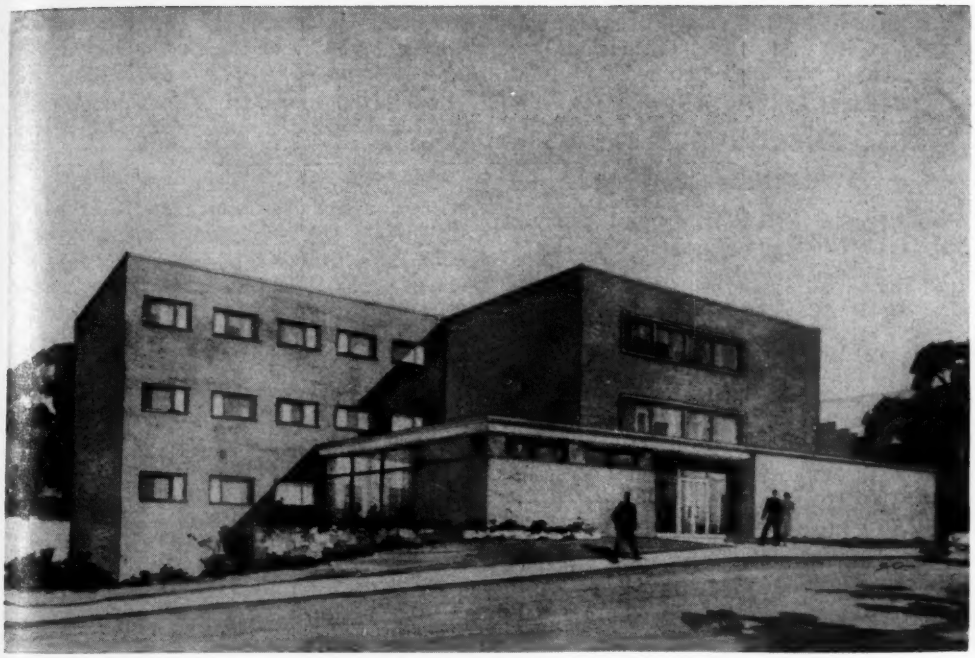
Erected on the site of several of the Clinic's annex buildings which were torn down to prepare a site for the new structure, the new structure, equipment, and land is expected to have a valuation of over a million dollars, and will require approximately thirteen months for completion. Plans for the Clinic prepared by Ellerbe and Company of St. Paul will embody the newest developments in this type of construction. Long recognized as the leading architectural firm in this type of building, the company has designed many clinics and hospitals throughout the country, including the Mayo Clinic buildings.

The new Clinic, constructed of concrete and steel, hollow tile, and brick, will be T-shaped. A tunnel will connect the Clinic with the Methodist Hospital for the convenience of patients and doctors. The air, washed, filtered, and humidified, will be heated or cooled as the outside temperature demands.

The new building will contain over 100 offices and rooms and will simplify and expedite the diagnosing and treatment of patients. The business office, the pharmacy, the departments of orthopedic, emergency, urology, obstetrics and gynecology, and the x-ray section, which will be divided into diagnostic x-ray, superficial therapy and deep x-ray therapy, will be located on the first floor.

Large, modern waiting rooms on the first and second floors will provide maximum comfort for patients. The second floor will accommodate 44 consultation and treatment rooms for the departments of pediatrics, general surgery, internal medicine, allergy, neurology, proctology, otolaryngology, and ophthalmology, and the optical dispensary.

The ground floor will house the library, the medical secretary pool, the physical therapy department, and the locker rooms for the doctors and employees. The editorial department and the medical record department, in which are filed about 200,000 medical records of patients, will be located here also.



Jackson Clinic, Madison, Wisconsin

Each year has seen the Clinic add not only to its staff and its equipment but to its service area. The majority of patients are from Wisconsin, Illinois, and surrounding areas, but patients also come from all the States, the territories, and many foreign countries. Nearly 200,000 patients have received attention at the Clinic, and approximately 60,000 visits are made by patients each year.

Since 1921 the Clinic has maintained a close relation with the Methodist Hospital. When the original Clinic building was destroyed by fire in 1929, the hospital generously supplied office space to the Clinic. The alliance proved so beneficial in the care of the patients that the Clinic acquired adjoining property in contemplation of a new building.

Dr. Hertz Honored

Although he is not a Swedish National, Dr. **John Hertz,** D.Sc., F.I.C.S., has been appointed by His Majesty the King of Sweden as Professor Ordinarius in Oral and Maxillary Surgery at the University of Stockholm.

Dr. Hertz has been serving as surgeon in the Copenhagen University Hospital in his own country, Denmark.

Preliminary Program for Southwestern Division Regional Meeting at Houston, Texas

Dr. **Herbert T. Hayes,** F.A.C.S., F.I.C.S., General Chairman for the Regional Meeting of the Southwestern Division of the United States Section, extends a cordial invitation to all members of the surgical and allied professions to attend the meeting being held in Houston, Texas, February 28 and March 1, 1955. Headquarters for the meeting is the Shamrock Hotel, while the scientific sessions will be held in the auditorium of the new Jesse H. Jones Library Building at the Texas Medical Center.

An interesting and varied program consisting of lectures, panel discussions and open forums has been planned.

MONDAY, FEBRUARY 28, 1955

MORNING SESSION

Auditorium—Jesse H. Jones Library Building

General Chairman: **Herbert T. Hayes,** M.D., F.A.C.S., F.I.C.S., Professor of Proctology, Baylor University College of Medicine, Houston, Texas

Presiding: **Arnold S. Jackson,** M.D., F.A.C.S., F.I.C.S., Madison, Wisconsin; President, U. S. Section, International College of Surgeons

Invocation **9:30-10:00 a.m.**

Right Reverend **Clinton S. Quin,** D.D., Bishop, Episcopal Church, Diocese of Texas

Greetings

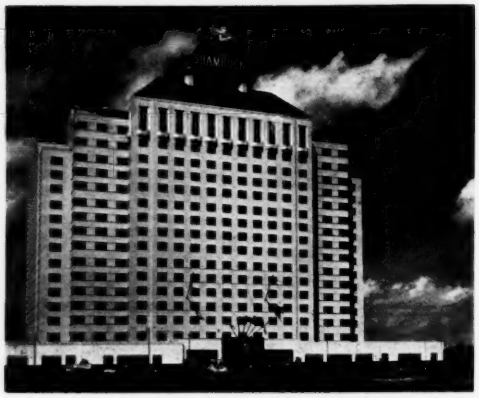
James Pittman, M.D., Houston, Texas, President, Harris County Medical Society

Announcements

SYMPOSIUM: SURGICAL CONDITIONS OF THE COLON **10:00-12:00 Noon**

Intestinal Antisepsis **10:00-10:20 a.m.**

Edgar J. Poth, M.D., F.A.C.S., Galveston; Professor of Surgery, University of Texas Medical School



Shamrock Hotel, Houston, Texas

Clinical Application of the Biochemistry and Physiology of the Lower Bowel **10:20-10:40 a.m.**

Russell O. Bowman, M.D., Houston; Associate Professor of Biochemistry, Baylor University College of Medicine

Carcinoma of the Colon **10:40-11:00 a.m.**

Randolph Lee Clark, Jr., M.D., F.A.C.S., Houston; Director and Surgeon in Chief, The University of Texas M. D. Anderson Hospital and Tumor Institute; Professor of Surgery, University of Texas Postgraduate School of Medicine

Diverticulitis **11:00-11:20 a.m.**

Curtice Rosser, M.D., F.A.C.S., F.I.C.S., Dallas; Professor and Head of the Division of Proctology, Southwestern Medical School of the University of Texas; President-Elect, U. S. Section, International College of Surgeons

Pathological Changes in Inflammatory and Neoplastic Diseases of Large Intestine **11:20-11:40 a.m.**

Stuart A. Wallace, M.D., Professor of Pathology, Baylor University School of Medicine, Houston

LUNCHEON—Doctors' Club, Library Building **12:00-2:00 p.m.**

Presiding: **Leo J. Starry,** M.D., F.A.C.S., F.I.C.S., Professor of Surgery, University of Oklahoma and Regent for State of Oklahoma

PANEL DISCUSSION—With Morning Speakers

AFTERNOON SESSION

Presiding: **Allen McMurrey,** M.D., F.A.C.S., F.I.C.S., Houston

Cancer of the Breast **2:00-2:30 p.m.**

Albert C. Broders, Sr., M.D., D.A.B.S., Temple, Texas; Professor of Surgical Pathology and Pathologic Anatomy, The Temple Division of the University of Texas Postgraduate School of Medicine; Director of Pathology, Scott and White Clinics

Examination of the Breast (Sound movie) **2:30-3:00 p.m.**

I. Dudley Jackson, M.D., F.A.C.S., F.I.C.S., San Antonio; Director, Nix Tumor Clinic; Consultant to Surgeon General of the Army

Intermission **3:00-3:15 p.m.**

Malignancies of the Vulva **3:15-3:45 p.m.**

Conrad G. Collins, M.D., F.A.C.S., New Orleans; Professor and Chairman of the Department of Obstetrics and Gynecology, Tulane University of Louisiana School of Medicine

Changing Concept with Regard to the Surgical Treatment of Cancer of the Cervix **3:45-4:15 p.m.**

Herbert F. Traut, M.D., F.A.C.S., San Francisco; Professor of Gynecology and Obstetrics, University of California School of Medicine

PANEL DISCUSSION: Gynecological Malignancies **4:15-5:15 p.m.**

Participants:

Herbert F. Traut, M.D., F.A.C.S.
Conrad G. Collins, M.D., F.A.C.S.
Albert C. Broders, Sr., M.D., D.A.B.S.
I. Dudley Jackson, M.D., F.A.C.S., F.I.C.S.

Social Hour—Doctors' Club **6:30-7:30 p.m.**

Dinner—Doctors' Club **7:30 p.m.**

Presiding: **Herbert T. Hayes,** M.D., F.A.C.S., F.I.C.S., Houston; Regent for State of Texas, U.S. Section, International College of Surgeons

ADDRESS: LETHEON: THE CADENCED STORY OF ANESTHESIA

Dr. Chauncy D. Leake, Dean of the Medical Branch of University of Texas, Galveston

ADDRESS AND MOTION PICTURE: INTERNATIONAL SURGEONS' HALL OF FAME

Max Thorek, M.D., F.I.C.S., F.B.C.S. (Hon.), F.P.C.S. (Hon.), F.R.S.M. (London), Chicago; Secretary General and Founder of the International College of Surgeons

TUESDAY, MARCH 1, 1955

MORNING SESSION

Auditorium—Jesse H. Jones Library Building

Presiding: **Joe R. Gandy,** M.D., F.A.C.S., F.I.C.S., Chief Surgeon, Southern Pacific Hospital, Houston

SYMPOSIUM—SURGICAL MANAGEMENT OF TRAUMA **9:00-10:30 a.m.**

Neurosurgery

Head Injuries and their Sequealae

Robert C. L. Robertson, M.D., F.A.C.S., Houston; Clinical Professor of Surgery (Neurosurgery), Baylor University College of Medicine

Plastic Surgery

Some Surgical Procedures Found to be Valuable in the Management of Trauma

Arthur Neal Owens, M.D., F.A.C.S., F.I.C.S., New Orleans; Professor of Plastic Surgery, Tulane University of Louisiana School of Medicine; Regent for State of Louisiana

Orthopedic Surgery

Emergency Care of Fractures in Large Numbers

Duncan C. McKeever, M.D., F.A.C.S., Houston; Associate Clinical Professor of Orthopedic Surgery, University of Texas Postgraduate School of Medicine

Abdominal Surgery

Abdominal Injuries

James W. Nixon, M.D., F.A.C.S., F.I.C.S., San Antonio; Clinical Professor of Surgery, University of Texas Postgraduate School of Medicine; Consulting Surgeon, U. S. Army at San Antonio

Chest Surgery

Diagnosis and Treatment of Chest Trauma

Howard T. Barkley, M.D., Clinical Professor of Surgery, University of Texas Medical

School and Associate Clinical Professor of Surgery, Baylor University College of Medicine, Houston

Urological Surgery

Trauma of the Urinary Tract; the Management of Trauma to the Urinary Tract

Michael K. O'Heeron, M.D., F.A.C.S., F.I.C.S., Houston; Clinical Professor of Urology, Baylor University College of Medicine; Associate Professor of Urology, University of Texas Postgraduate School of Medicine

Question and Answer Period
10:30-12:00 Noon

LUNCHEON—Varsity Room, College Inn **12:00-1:30 p.m.**

Presiding: **J. Reese Blundell,** M.D., F.I.C.S., Professor of Urology, Baylor University College of Medicine, Houston

AFTERNOON SESSION

Presiding: **S. Baron Hardy,** M.D., F.A.C.S., F.I.C.S., Director of Clinics, Jefferson Davis Hospital and Professor of Plastic and Reconstructive Surgery, Baylor University College of Medicine, Houston

PANEL DISCUSSION: Surgery in the Modern Hospital **1:30-3:00 p.m.**

The Surgeon

Leo J. Starry, M.D., Professor of Surgery, University of Oklahoma, Oklahoma City

Administration and Accounting

Leigh J. Crozier, M.D., Director of Hermann Hospital, Houston

Pathology

Stuart A. Wallace, M.D., Professor of Pathology, Baylor University College of Medicine, Houston

Anesthesiology and Recovery Room

P. H. Chalmers, M.D., Director of Anesthesiology, Methodist Hospital and Clinical Associate Professor of Anesthesiology, Baylor University College of Medicine, Houston

Operating Room Service, Nurses and Supervision

Leola Scales, R.N., Administrative Operating Room Supervisor and Director of Nurses, St. Luke's Hospital, Houston

Tour of the University of Texas **3:00 p.m.**
M.D. Anderson Hospital and Tumor Institute

The sessions are not limited to members of the International College of Surgeons but are open to any interested person. A registration fee of $5.00 will be charged all participants with the exception of residents, interns, nurses and the Military. Registration will begin at 8:00 a.m. Monday, February 28, 1955.

All room reservations should be made directly through the Shamrock Hotel, Houston, Texas.

Twentieth Annual Congress

Plans are well under way for the 20th Annual Congress of the United States and Canadian Sections, which will be held in Philadelphia, Pennsylvania, from September 12 to 15, 1955, announces Dr. **Moses Behrend,** F.A.C.S., F.I.C.S., General Chairman in charge of the meeting.

Headquarters will be in the Bellevue Stratford Hotel, one of Philadelphia's finest hostelries. A scientific program of value and interest is being planned under the leadership of Dr. **Harry E. Bacon,** F.A.C.S., F.I.C.S., which, he states, will follow the tradition of the presentation of programs *par excellence* which has been created over the last 20 years.

Details regarding hotels available and further program plans will be given in the February issue of the ***Bulletin.***

Colombian Section

Surgeons of Colombian Republic Great Surgeons of the Past

In the beautiful Colombian room of the International Surgeons' Hall of Fame on Lake Shore Drive in Chicago, the fine sculptures shown in the photograph below commemorate four Colombian surgeons whose lives and work are still cherished in the hearts of their countrymen.

The periods during which these men lived and worked were obviously very different from our own. Even Dr. Razetti, whose career ended in 1932, was very far from having the many facilities most surgeons have today. Yet he and hundreds of others before him performed miracles of surgery in their times. There is no greater evidence of the indomitable spirit of man than can be found in even a cursory glance at the history of medicine and surgery. It is well to pause for an occasional backward glance, if only to make us appreciate present blessings. The very keystone of the International Surgeons' Hall of Fame is the recognition of the fact that many of the successful operations that bring us such stimulating satisfaction today were performed by our forebears under handicaps that would seem insurmountable to a modern surgeon. The only possible conclusion is that what these men lacked in equipment and scientific knowledge they made up in ability and devotion.

In Colombia these qualities continue to vitalize science. The Colombian Section of the International College of Surgeons, from the day of its foundation, has given proof of the scientific integrity and the idealistic vision that make greatness possible. In honoring the great men of the past, we honor no less those among whom will be found the great men of the future.

Giants of Colombian surgery, as immortalized in the Colombian Room of the International Surgeons' Hall of Fame.

French Section

Second Course Offered by Dr. Marc Iselin

The second postgraduate surgical course held in the Service of Dr. **Marc Iselin,** F.I.C.S., was offered during September at Nanterre Hospital, Paris. This course, following the same procedure as the one held from May 2 to 7, consisted of theoretical lectures and practical cadaver work. It was open only to surgeons.

The opportunity to work under Dr. Iselin was found extremely valuable by the following surgeons who attended the series:

Dr. **Mottiron,** Geneva, Switzerland
Dr. **Hasbrougq,** Hénin-Liétard, France
Dr. **Stucki,** Zweisinen, Switzerland
Dr. **Berchtold,** Lucerne, Switzerland
Dr. **Quast,** Groningen, Holland
Dr. **Bianchi,** Bologna, Italy
Dr. **Galli,** Bologna, Italy
Dr. **Pieper,** Bochum, Germany
Dr. **Guggenbuhl,** Licetal, Switzerland
Dr. **Koslousky,** Ruremonde, Holland
Dr. **Borer,** Steinen, Switzerland
Dr. **Leclercq,** Liège, Belgium
Dr. **Vermynck,** Laon, France
Dr. **Chauvigny dę Blot,** Chauny, France
Dr. **Buhlmann,** Berne, Switzerland
Dr. **Wilhelm Kramer,** Friedberg-Hesen, Germany, F.I.C.S.
Dr. **Gambier,** Venice, Italy
Dr. **de Tenermann,** Bruzelles, Belgium, and
Prof. **Dubau,** Val de Grâce, Paris, France.

Japanese Section

Inaugural Meeting in Osaka

The inaugural meeting of the Japanese Section of the International College of Surgeons was held in Osaka, Japan, in November 1954. The following officers were elected:

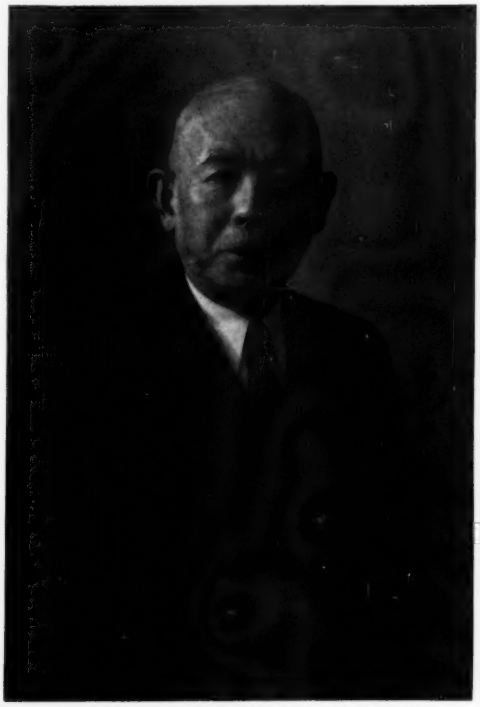
President:
Dr. **Hiroshige Shiota,** F.I.C.S. (Hon.), President of the Nippon Medical College, Tokyo

Vice-President:
Dr. **Hito Iwanaga,** F.I.C.S., President of the Kansai-Rosai Hospital, Amagasaki

Secretary:
Dr. **Komei Nakayama,** F.I.C.S., Professor of Surgery, Chiba University Medical School, Chiba

Board of Trustees:
Dr. **Soichi Yanayi,** F.I.C.S., President of the National Sagamihara Hospital, Sagamihara

Dr. **Shigeru Sakakibara,** F.I.C.S., Professor of Surgery, Tokyo Women's Medical College, Tokyo



Dr. Hiroshige Shiota, President of the Japanese Section.

Dr. Komei Nakayama, Secretary of the Japanese Section of the International College of Surgeons.

Drs. Shiota and Nakayama are also members of the International Board of Trustees.

The membership of the new Section is outstanding, comprising, as it does, Professors of Surgery and faculty members from fifteen University medical schools; and Presidents of fifteen Japanese hospitals. This distinguished list of institutions is as follows:

University Medical Schools:
Nippon Medical College
Chiba University Medical School

Tokyo Women's Medical College
Kyoto University Medical School
Jutendo Medical College
Nagoya University Medical School
Tohoku University Medical School
Kanazawa University Medical School
Osaka University Medical School
Keio Gijuku University Medical School
Kyushu University Medical School
Tokyo Jikeikai Medical College
Okayama University Medical College
Tokyo University Medical School
Sapporo University Medical School

Hospitals:

Kansai-Rosai Hospital
National Sagamihara Hospital
National Tokyo First Hospital
Japanese Red Cross Central Hospital
Tobata-Kaiin-Kyoeki Hospital
Kawase Surgical Hospital
Kikucki Surgical Hospital
Murakami Surgical Hospital
Taniguchi Surgical Hospital
Ono Surgical Hospital
Maeda Surgical Hospital
Ryu Surgical Hospital
Iwamoto Surgical Hospital
Cho Surgical Hospital
Fukuchi Surgical Hospital

The meeting, which was memorable for the dignity of the installation, the earnestness of the participants and the colorful and charming setting, was held in the Yuhigaoka Hall in Osaka and was attended by thirteen American surgeons in the course of the recent world tour made by Fellows of the International College.

Introduction of Dr. Harry E. Bacon to Prof. Shiota during inaugural meeting of Japanese Section in Osaka.

Scene at scientific meeting held at the University of Chiba.

Presentation of medals at banquet on the occasion of the inauguration of the Japanese Section of the International College of Surgeons.

Dr. **Hiroshuge Shiota,** President, occupied the chair and delivered the opening address, bespeaking a prosperous future for the new organization — as well he might, since the great enthusiasm of many Japanese surgeons for the College and its work has long been manifest. Dr. **Max Thorek** of Chicago gave an illustrated lecture on the International Surgeons' Hall of Fame, in the course of which he expressed much satisfaction in the filling of this long-standing need for some positive recognition of greatness in surgery without regard to race, creed or nationality.

With the traditional courtesy for which Japan is noted throughout the world, the Japanese surgeons granted their American guests the lion's share of the scientific program, which was as follows:

The Cerebrospinal Fluid from the Surgical Point of View

Dr. **Chisato Araki,** F.I.C.S., Professor of Surgery, Kyoto University Hospital, Kyoto, Japan

Present Status of the Treatment of Peptic Ulcer

Dr. **Ulysses Grant Dailey,** F.A.C.S., F.I.C.S., Provident Hospital, Chicago, Illinois

Evolution of Surgery of the Gall Bladder

Dr. **Moses Behrend,** F.A.C.S., F.I.C.S., Jefferson Hospital, Philadelphia, Pennsylvania

Surgical Treatment of Cancer of Rectum by Abdominoperineal Proctosigmoidectomy Without Colostomy and with Preservation of the Anal Sphincter

Dr. **Harry Bacon,** F.A.C.S., F.I.C.S., Temple University, Philadelphia, Pennsylvania

The Surgical Treatment of Cancer. A Consideration from the Standpoint of Permanent Cure

Dr. **Masaru Kuru,** F.I.C.S., Professor of Surgery, Osaka University Hospital, Osaka, Japan

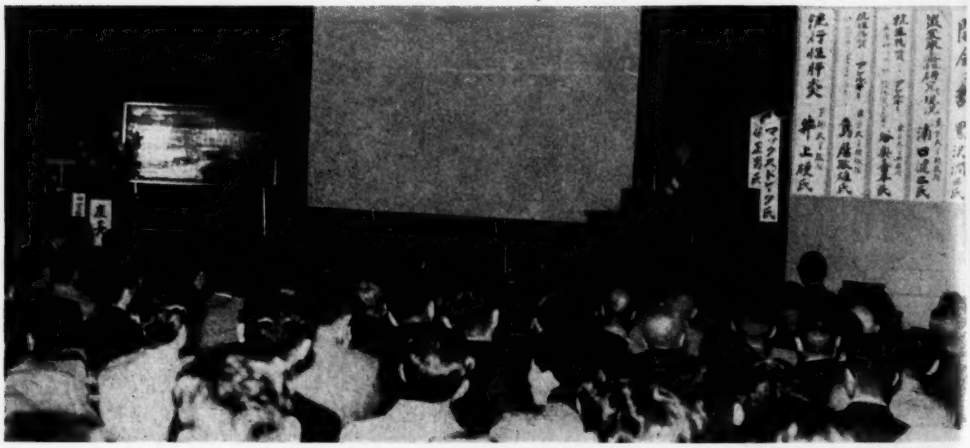
Dupuytren's Contracture of the Hands and Feet

Dr. **Henry W. Meyerding,** F.A.C.S., F.I.C.S. (Hon.), Mayo Clinic, Rochester, Minnesota

The Importance of Early Diagnosis of Breast Tumor

Dr. **Nolie Mumey,** F.B.C.S., F.I.C.S., Presbyterian Hospital, Denver, Colorado

Management of Severe Gastric Hemorrhage



Inauguration meeting of new Japanese Section of the International College of Surgeons, Osaka, Japan.

Scene at inaugural banquet of newly founded Japanese Section of the International College of Surgeons.

Presentation of plaque commemorating formation of the Japanese Section. *Center*, Prof. Shiota; *right*, Prof. Nakayama.

Dr. **T. M. Rogers**, F.I.C.S., St. Benedict Hospital, Sterling, Colorado

Modern Aspects of the Tonsil Problem
Dr. **Herbert L. Cahn**, F.I.C.S., New York Medical College, New York City, New York

Herniated Intervertebral Discs
Dr. **Fred L. Knowles**, F.I.C.S., St. Joseph's Mercy Hospital, Fort Dodge, Iowa

Psychosexual Problem in Pelvic Disorders
Dr. **Theodore E. Mandy**, F.I.C.S., Sinai Hospital, Baltimore, Maryland

Physical Law of Repair and the Healing of Wounds
Dr. **W. C. Speidel**, F.I.C.S., Former President, Seattle Surgical Society, Seattle, Washington

Management of Goiter

Dr. **J. Harry Hayes,** F.A.C.S., F.I.C.S., University Hospital, Little Rock, Arkansas

Acute Gall Bladder Disease in the Aged
Dr. **S. J. Carnazzo,** F.A.C.S., F.I.C.S., Creighton University, Omaha, Nebraska

Basal Temperature as a Guide to Ovulation
Dr. **C. W. Mills,** F.I.C.S., Norwalk Hospital, Norwalk, Connecticut

Some Effects of the Vertically-Acting Muscles on Horizontal Ocular Deviation
Dr. **William E. Krewson,** F.I.C.S., Ophthalmologist, Philadelphia, Pennsylvania.

A delightful banquet, with the awarding of testimonial plaques and medals, concluded the occasion. Those in attendance from the United States were deeply impressed by the hospitality offered them and by the honors paid by the Japanese surgeons to the International College of Surgeons, of which the Japanese Section is now an integral part. The College herewith extends its official welcome to the new Section, a welcome as hearty and sincere as friendship can make it.

Mr. J. Graham Parsons, Minister of the United States, at audience of Dr. Max Thorek with Emperor Hirohito at Tokyo on the occasion of the inauguration of the Japanese Section.

Foreign Interns and Residents Available

Approved hospitals in the United States and Canada which have openings for interns and residents are requested to communicate with the Secretariat of the International College of Surgeons, 1516 Lake Shore Drive, Chicago 10, Illinois.

Netherlands Section

November Meeting of the Netherlands Section at Hilversum

The Netherlands Section held its meeting on Nov. 20, 1954, at Hilversum. Members of the German Section, **Prof. K. Boshamer,** M.D., F.I.C.S., of Wuppertal, and Prof. **Carl J. Anselmino,** M.D., F.I.C.S., of Wuppertal-Elderfeld, and their wives were welcomed as honored guests.

The scientific session met in the sanatorium for Lung Diseases, *Zonnestraal,* a 400-bed institution founded by the man known nationally as "Uncle Jan van Zutfen," who, at 91, still takes an active part in running this private hospital. Dr. **Waardenburg,** lung specialist of the team operating in Zonnestraal, presented a paper discussing the results obtained by operating procedures in 80 cases of tuberculosis of the lungs treated during the last year. Dr. **Frits Pauw,** F.I.C.S., read a paper covering the problems presented by bronchial fistula as a complicating factor in lung resections.

While the scientific meetings were being held, the wives of the participating members and their guests visited the building of the broadcasting company and attended an exhibit of art weaving and handmade ornaments.

The Sectional Meeting closed with a dinner at the beautiful castle *"Hoge Vuursche,"* near Hilversum, and was followed by a dance at Laren.

Committee Formed to Select Material for Surgeons' Hall of Fame

The Netherlands Section announces the appointment of the following members to serve as a committee to secure material for the Netherlands Room in the International Surgeons' Hall of Fame, 1524 Lake Shore Drive, Chicago 10, Illinois:

Prof. **R. J. Forbes,** President (also President of the Netherlands Society for the History of Medicine and Physica)

Dr. **J. A. van Dongen,** librarian of the Royal Netherlands Society of Medicine

Dr. **Theodore Schlichting,** Associate Prof. in History of Medicine, University of Amsterdam

Dr. **A. Melchior,** President of "Pincet en Penseel," society of doctor-painters

Dr. **A. G. J. Hermans,** representing the Netherlands Society of Surgeons

Dr. **D. van Cappellen,** F.I.C.S. (Hon.), representative of the Netherlands Society of Urology

Dr. **A. C. de Vet,** representative of the Netherlands Society of Neurosurgeons

Dr. **P. J. Kooreman,** representative of the Netherlands Society of Thoracic Surgery

Dr. **G. ten Doesschate,** representative of the Netherlands Society of Ophthalmology

Drs. **G. Chapchal,** F.I.C.S., and **F. H. van Gulik,** F.I.C.S., representing the Netherlands Section of the International College of Surgeons

Dr. **Jacobus Glazenburg,** F.I.C.S., secretary of the committee, and

Dr. **M. Rooseboom,** Directress of the State Museum for the History of Medicine.

The committee has started work by selecting the most important surgeons from the names of 50 prominent medical men living in the Netherlands from 1300 to 1900 A.D. who were nominated for the honor. Photographs will be taken of the original portrait engravings of the chosen surgeons, and the first page of the most important work of each will be reproduced. An attempt will also be made to include some original works in the collection, if these can be obtained.

It is planned to ask the Department of Arts of the Netherlands government to have a copy made of one of the best of the twelve anatomic lessons in its possession. While the work of *Rembrandt* in this field is best known, it is not the most representative example of this material.

A replica of the microscope first made by *van Leeuwenhoek* will probably be made available, in addition to other early instruments.

Definite decisions on the materials to be included in the collection will be made in February, when the committee will meet with government authorities at The Hague to discuss final selections.

Medal Presented to Dr. M. Vink

The outstanding work of Dr. **M. Vink**, F.I.C.S., entitled "The Role of Implantation Metastases and Bowel Disinfection," partly published in the *British Journal of Surgery*, January 1954, was recognized by the Society for "Nattur-Genees-en Heelkunde" on Dec. 1, 1954, when the Golden Tilanus medal was awarded to Dr. Vink.

This high distinction has been presented only once every ten years by the Society since its foundation in 1790.

Dr. D. van Cappellen Honored

The Royal Distinction of Officer in de Orde van Oranje Nassau was awarded to Dr. **D. van Cappellen**, F.I.C.S. (Hon.), at the meeting of the Netherlands Registration Board of Specialists on Oct. 23, 1954, in recognition of his outstanding services during the twenty-nine years he has been President of the Board.

PLAN NOW TO ATTEND

the Twentieth Anniversary International Surgical Congress

in Geneva, Switzerland

commemorating the founding of the International

College of Surgeons in 1935

See Announcement on Back Cover

Woman's Auxiliary

On December 11, 1954, the Board of the Woman's Auxiliary of the United States and Canadian Sections met at the College Home in Chicago. Despite all distractions of the holiday season, Mrs. **Floyd E. Keir** of Englewood, New Jersey, Mrs. **Clifton L. Dance** of Brooklyn, New York, Mrs. **Herbert W. Goebert** of Coatesville, Pennsylvania, Mrs. **Paul Doege** of Marshfield, Wisconsin, Mrs. **Harold E. Baker** of Toronto, Canada, Mrs. **D. H. Downey** of Dover, Ohio, Mrs. **Arnold Jackson** of Madison, Wisconsin, Mrs. **Lester Luxenberg** of Philipsburg, Pennsylvania, Mrs. **Curtice Rosser** of Dallas, Texas, and Mrs. **Donald Dickerson** of Danville, Illinois joined board members living in the Chicago area to discuss current business.

Mrs. Floyd E. Keir, First Vice-President. Her gracious personality has endeared her to all members and friends of the Auxiliary.

Mrs. Louis F. Plzak, Treasurer. The important duties of this office are in most capable and conscientious hands. Mrs. Plzak's work is done so promptly, accurately and efficiently as to seem almost effortless.

Among the items of particular interest were the Woman's Auxiliary Memorial Fund; the establishment of a cumulative fund; the publication of a year book, and plans for the entertainment of women attending the Regional Meetings during the coming year. Mrs. **V. T. DeVault** was appointed by the Board to represent the Auxiliary in planning for the meeting in Washington. Mrs. **McKenzie Hallson** will be in charge of plans made for the women who will come to Houston, Texas, February 27 to March 1. She has arranged for

Mrs. McKenzie Hallson

a Hospitality Room at the Shamrock Hotel and has reserved the Sky Terrace of the Sakowitz Brothers building for a fashion show and tea at 3 p.m. on March 1. Garden tours possible at that time of the year will make the days in Houston especially delightful.

Mrs. M. L. Brodny is working on the plans for the meeting in Cape Cod, July 1-4. The possibility of undertaking new projects was referred for additional study.

After a buffet luncheon in the Fellowship Room, members of the Board joined the Executive Council for a tour of the Hall of Fame, conducted by Dr. **Max Thorek.** There they had an opportunity to see some of the fascinating exhibits housed in this beautiful setting, so fittingly dedicated to greatness in one of the greatest of all professions.

GAIL BROOK BURKET, *President*

For information pertaining to qualifications for

FELLOWSHIP, ASSOCIATE AND JUNIOR MEMBERSHIP

in the United States Section
of the International College of Surgeons

Write KARL A. MEYER, M.D., F.A.C.S., F.I.C.S., Secretary
1516 Lake Shore Drive, Chicago 11, Ill.

General News Notes

Report on AMA Interim Meeting

The American Medical Association's Interim Meeting was held at Miami, Florida, on December 2, 1954. The outstanding event was a symposium on hypertension and arteriosclerosis.

Dr. **Victor H. Kugel,** Chief of the Department of Cardiovascular Diseases at Mt. Sanai Hospital, Miami Beach, acted as moderator. Speakers, in order of their appearance, were Dr. **E. Cowles Andrus,** F.A.C.P., Associate Professor of Medicine at Johns Hopkins University School of Medicine in Baltimore, Maryland; Dr. **J. Gordon Barrow,** Associate in Medicine, Emory University School of Medicine, Atlanta, Georgia; Dr. **J. Edwin Wood,** Jr., F.A.C.P., Professor of Internal Medicine, Department of Medicine, University of Virginia, Charlottesville, Virginia, and Dr. **George E. Burch,** F.A.C.P., Professor and Chairman of the Department of Medicine, Tulane University School of Medicine, New Orleans, Louisiana.

Among treatments discussed was surgical sympathectomy; the use of veratrum alkaloids and rauwolfia and its derivatives; hexamethonium and pentolinium tartrate (the ganglionic blocking agents), and hydralazine and the use of drug combinations in the management of hypertension.

In his opening address Dr. Kugel emphasized the progress that has been made in the treatment of hypertension in the past few years. The general keynote of the symposium was the brightening outlook for the patient with hypertension.

New Jersey Academy of Medicine Holds Conference on Heparin

A special "heparin symposium" was held on Dec. 16, 1954, by the Academy of Medicine of New Jersey at Newark. Moderator for the symposium was Dr. **Irving S. Wright,** Professor of Clinical Medicine at Cornell Medical School and Past President of the American Heart Association. Guest speakers were Dr. **James Barron,** Associate Surgeon at the Henry Ford Hospital, Detroit; Dr. **John W. Gofman,** Associate Professor of Medical Physics at the University of California, Berkeley; Dr. **Jere W. Lord Jr.,** Professor of Clinical Surgery at New York University, and Dr. **William T. Foley,** Chief of the Vascular Clinic at New York Hospital. The speakers discussed the use of heparin in the treatment of thromboembolic disturbances arising in the venous system; the clearing factor and subjects related to atherosclerosis; the use of heparin in cardiovascular surgery, and the organization of a heparin team in a hospital. The proceedings of this symposium will be published in the Bulletin of the Academy. A film recording the occasion and presenting the speakers is being prepared for showing to medical groups throughout the United States. Physicians interested in seeing this film are requested to write to the Academy of Medicine of New Jersey, 91 Lincoln Park South, Newark, New Jersey.

Physical Education Institute

At the three-day Adapted Physical Education Institute sponsored by the New York University School of Medicine and the Association for Physical and Mental Rehabilitation and held in the Waverly auditorium of the University's Washington Square Center in New York from December 6 to December 8, the following resolution was adopted:

Since the members of the Adapted Physical Education Institute believe that children with handicaps will benefit from a physical education program which is specifically adapted to their needs.

And because the Institute recognizes that these special programs are not available to many handicapped children, it

therefore proposes that the following basic action be taken to promote such programs:

That a model program of adapted physical education be conducted for a period of one year in order to demonstrate the values, procedures, and problems connected with such a program. It is proposed that the following aspects be included in planning this project:

1. That a survey of the schools be conducted to determine the number of handicapped children and the nature of their handicaps.

2. That certain schools be selected for this project where there are sufficient numbers of handicapped children.

3. That a program of in-service training in adapted physical education be conducted for the physical education teachers who will carry out these programs in the designated schools.

4. That the adapted physical education program to be carried on in these schools be planned by a group of professionally competent leaders who will be selected for this purpose.

5. That this program be carried out for a period of one year, during which time it will be continuously evaluated.

6. That at the end of the year's time a complete report of evaluation be prepared and given to the participating and other interested agencies.

To follow up on the above proposals, we recommended;

1. That a planning committee be appointed and empowered to carry out these steps.

2. That we explore all possible sources of funds and support for this project.

This resolution was unanimously adopted by the 150 participants in the Institute, a group including specialists in medicine, psychiatry, physiatry, physiology and physical education from all sections of the United States.

Cancer Seminar in Arizona

Dr. **Edward H. Bregman,** Chairman of the Arizona Division of the American Cancer Society, has announced the program for the Third Annual Cancer Seminar, to be presented at Paradise Inn in Phoenix, Arizona, on January 13, 14 and 15, 1955.

An outstanding panel of speakers will participate in the program, which will concentrate this year on cancer of the gastrointestinal tract, the female genital tract and the genitourinary tract, as well as on tumors of bone. An evaluation of current methods of treating cancer of the breast will be presented, as well as a discussion of the American Cancer Society's study of smoking practices in relation to health and cancer.

Speakers have been enlisted from among the leading cancer specialists of the country. They include Dr. **Alexander Brunschwig, F.A.C.S., F.I.C.S. (Hon.)**; Dr. **Charles S. Cameron, F.A.C.S.**; Dr. **Juan Angel del Regato;** Dr. **Louis Lichtenstein;** Dr. **Averill Liebow;** Dr. **Victor P. Marshall;** Dr. **Reed Nesbit, F.A.C.S.**; Dr. **George T. Pack,** F.A.C.S., and Dr. **Eugene P. Pendergrass,** F.A.C.P.

A large registration is expected, since the occasion offers the double attraction of a worthwhile seminar and a delightful winter vacation in the Southwest. Those wishing to register may do so by communicating with the American Cancer Society, Arizona Division, 1429 North First Street, Phoenix, Arizona.

Disciplinary Action in Wisconsin

The Wisconsin State Board of Pharmacy, in the first such case to come under its consideration, recently placed eight pharmacists of the Milwaukee area on probation for two years. The eight pharmacists, charged with substituting capsules other than those ordered in prescriptions, did not contest the action.

Symposium on Cancer Research

The Ninth Annual M. D. Anderson Symposium on Fundamental Cancer Research will be held March 10, 11 and 12, 1955, at

the University of Texas M. D. Anderson Hospital and Tumor Institute in the Texas Medical Center, Houston.

The first day will be devoted to a review of the current research projects at the hospital. This will be followed in the evening by the first formal gathering for the Symposium: a discussion of the Epidemiology of Cancer by Miss **Eleanor Macdonald**, followed by a presentation on Experimental Design by Dr. **John Fertig**, Professor of Columbia University Medical School, Department of Statistics.

The subject of the second day's program is histochemistry. Dr. **George Gomori**, F.A.C. Path., of the University of Chicago, is Chairman of this program and has chosen six national figures as speakers.

The final day will be devoted to presentations reflecting current cancer research in the Southwest. Dr. **A. Clark Griffin** of M. D. Anderson Hospital has assembled an interesting series of papers.

The Bertner Award will be made the evening of March 11, at a banquet held at the Doctors' Club in the Library Building of the Texas Medical Center.

Vital Statistics Forecast

The lowest death rate in the history of the country and the largest annual number of births were forecast for 1954 by Dr. **Leonard A. Scheele**, Surgeon General of the Public Health Service of the U. S. Department of Health, Education, and Welfare. Dr. Scheele made his statement on the basis of vital statistics reports for the first ten months of the year.

The death rate for the year is expected to close at 9.2 deaths per 1,000 population, a substantial drop from the rates of 9.6 or 9.7 which have prevailed over the past five years. The absence of any reported outbreak of influenza in 1954, with consequent low death rates for the chronic cardiovascular diseases, was cited as a principal reason for the decline. Infant and maternal deaths were also expected to hit new lows.

Births will top the 4,000,000 mark for the first time, according to preliminary estimates. The expected birth rate of 25.2 per 1,000 population is the second highest in 28 years, and only 5.3 per cent below the peak year of 1947. A continuing rise in the births of third, fourth, and fifth children is probably responsible for the birth increases in 1953 and 1954. No increase in births of first children was expected because of falling marriage rates since 1951.

The marriage rate sank to 9.2 per 1,000 population in the first ten months of 1954, compared with 9.7 for the same period the year before. Low birth rates during the 1930's, resulting in relative scarcity of young people of marriageable age in the present decade, were held chiefly responsible for the marriage decline.

Divorces in the first nine months of 1954 were down 4 per cent from the comparable 1953 period, on the basis of reports from 25 areas. Since the 1946 peak, divorce rates have dropped over 40 per cent.

Monograph on Clinical Resources in Small Hospitals Issued

A method of measuring variety of clinical experience small hospitals offer nursing students is given in a new Public Health Service monograph issued with the December issue of Public Health Reports.

The publication, "Appraising the Clinical Resources in Small Hospitals," gives a simple method of gathering facts on diagnostic conditions in hospitals of different sizes. The article suggests that the method may be particularly useful to nursing schools in deciding whether to include small community hospital experience in students' programs. It also is of interest to those concerned with planning hospital facilities and coordinating hospital programs.

The Medical College of Virginia and the Virginia Hospital Association cooperated in the undertaking, and 30 Virginia hospitals supplied information on types of diagnoses.

New Products

New Film-Strip Projector

Viewlex, Inc., announces a companion piece for the Viewlex precision slide or combination slide and film-strip projector, the *Viewtape*, an unusually sturdy, performance-perfect tape recorder engineered and designed to feature lightweight portability and quiet, efficient operation.

The *Viewtape*, taking up to a five inch reel, permits a full hour recording by using a dual-track, single speed tape. The machine comes complete with microphone, power line cord, one reel of tape and the take-up reel. The speaker, located in the cover of the carrying case, is removable while the speaker cord, also carried in the cover, is jacked into the amplifying system.

According to the manufacturers, this compact machine answers the need for a sound projector that does not demand operation by an electrical engineer.

New Penicillin-'Benemid' Combination Offered

Suspension 'Remanden' — 100, combining penicillin and 'Benemid' probenecid, has been released for national distribution by Sharp & Dohme, Division of Merck & Co., Inc.

This pleasantly flavored liquid form of 'Remanden' for patients who find it difficult or impossible to swallow tablets or capsules will retain its potency for as long as two years without refrigeration. Packaged in 60 cc. bottles, each 5 cc. of the suspension will contain 100,000 units of penicillin and 0.25 Gm. of 'Benemid'.

In 1951 it was reported that the plasma penicillin concentrations resulting from the administration of penicillin, orally or parenterally, is increased 2 to 10 times by 'Benemid'.

Suspension 'Remanden' — 100 is designed for oral administration in the treatment of infections in which penicillin is indicated. These may include pneumococcic, streptococcic and staphylococcic infections.

Oral administration of an effective form of penicillin means greater convenience for the patient and time saved for the physician and the nursing staff. The necessity of crushing tablets is avoided and more flexible dosage is assured.

Spinal Analgesia with Pontocaine

Low spinal analgesia with Pontocaine is the choice method of anesthesia for most transurethral prostatectomies according to Drs. Constance L. Graves, F. M. Sellers and Mary Karp of Northwestern University Medical School.

Reporting on an analysis of 1,176 prostatectomies in 1,068 patients (*J.A.M.A.* 156:1045 [Nov. 13] 1954), the investigators note that low spinal was used in 80 per cent of the operations. This procedure was "satisfactory" and "gave a high degree of safety." There were relatively few reactions and, in most cases, they were not serious.

Almost 40 per cent of the patients had some form of cardiovascular disease, the vast majority of hypertensive and arteriosclerotic origin. The commonest disease was carcinoma of the prostate.

One of the most significant findings in the study, which covered the ten-year period from 1942 to 1952, was the fact that "no deaths occurred after this operation since 1949." The mortality rate for the entire period was 1.3 per cent.

Low spinal analgesia with Pontocaine is called safer for patients with respiratory or cardiorespiratory conditions and for elderly surgical patients.

A conscious patient, moreover, is able to report unusual pain that may indicate perforation of the bladder. Postoperatively, the doctors say, such patients require less supervision.

In Memoriam

Francisco Castillo Najero, M.D., F.A.C.S., F.I.C.S. (Hon.)

One of Mexico's outstanding medical and diplomatic leaders, Dr. Francisco Castillo Najera, died in Mexico City on December 20 at the age of 68, after a long illness. He is survived by his widow and five children.

Born in Durango in 1886, Dr. Castillo Najero attended the Colegio del Estado de Durango. In 1903 he received his medical degree from the Faculty of Medicine of the University of Mexico and went to Paris and Berlin for graduate work.

After practicing and teaching medicine for some years, he was caught up in the flood of national revolution. Entering the medical service of the Mexican Army, he was commissioned a major in 1915 and rose to brigadier general in 1921.

Dr. Najero served as director of Juarez Hospital in 1918-19. At various times he served as director of the Hospital Militar de Instucción, as Professor of Urology in the Army Medical School, as head of the Council of Legal Medicine of the Federal District, as director of the Army Medical School and as a member of the International Commission for a Drive Against Yellow Fever. He was a noted physician and a contributor to the medical literature.

Having aided in the establishment of civil government in Mexico, Dr. Najero became a leader in the diplomatic exchanges by which government thrives. Friendship between Mexico and the United States reached its highest point from 1935 to 1945 when Dr. Najero was ambassador to Washington. In a period of many vexing disputes and problems between the two nations, Dr. Najero shuttled between the capitals, using the tact and ability which he seemed able to generate in unlimited quantities.

In 1938 he was instrumental in working out the device by which Mexico agreed to pay United States citizens for agricultural land expropriated by the Mexican government, and with an *ex post facto* agreement that no precedent had been established thereby. In 1941 he played a major role in negotiating an agreement under which the United States arranged to stabilize the Mexican peso, buy large fixed amounts of Mexican silver and finance an extensive Mexican road-building program in return for a payment by Mexico of $37,000,000 over a fourteen-year period for settlement of agrarian and "general" claims of citi-

Dr. Francisco Castillo Najero

zens of the United States, for a trade agreement, and for an attempt to negotiate the oil-expropriation controversy. In 1943 this controversy, through the mediations of Dr. Najero and other prominent Mexicans, was finally settled.

Dr. Francisco Castillo Najero constantly worked for unity between his country and the United States, and later between Mexico and the members of the United Nations. Early in 1946 he served as Chairman of the Security Council of the United Nations. During 1946, the year after his retirement as Ambassador to Washington, Dr. Najero served his country as Foreign Minister and was instrumental in shaping Mexico's postwar foreign policies.

Dr. Najero will be missed by his colleagues in the International College of Surgeons. Men of his abilities and qualities are rare, their lives offering a perpetual challenge to others.

Edmund A. Proby
M.D., F.I.C.S.

On October 12, 1954, Dr. Edmund A. Proby of Chicago, Illinois, died at South Shore Hospital, where he was a member of the staff.

He was born in Chicago in 1898 and attended Hyde Park High School, from which he was graduated in 1917. He matriculated at Lewis Institute to study liberal arts and premedical work and received his A.B. degree in 1923. He then went to Loyola University School of Medicine, where he earned a B.S. degree in 1925 and an M.D. degree in 1927. He interned at South Shore Hospital in 1927-1928 and served his residency there in 1928-1929, remaining there as assistant to Dr. Weller Van Hook from June, 1929 to June, 1932, at which time he went to Cook County Hospital to do graduate work in pathology. From July, 1934 to the time of his death he remained a staff member of South Shore Hospital. In addition, he taught anatomy for one year at Loyola University School of Medicine.

Dr. Proby was a member of the American Medical Association, the Illinois Medical Society and the Chicago Medical Society. In 1947 he became an Associate of the International College of Surgeons and later became a Fellow of the College. He is survived by his widow, two sons, his mother and three brothers.

Paul Emile Laflamme
M.D., C.R.C.S. (Can.), A.I.C.S.

An automobile accident in June, 1954, cost the life of Paul Emile Laflamme of Sudbury, Ontario.

Dr. Laflamme received his degree in medicine from Montreal University, Montreal, Quebec, Canada, in 1924 and interned from 1924 to 1927 at Notre Dame Hospital. He then went to Europe to do graduate work at Polyclinic Hospital in Vienna for 6 months and at Szentes, Austria for 3 months. He returned to Canada to begin private practice, and became a member of the staff at St. Joseph's Hospital, Sudbury, Ontario, Canada.

Dr. Laflamme joined the surgical staff at St. Joseph's in 1935 and has been connected with that institution continuously since that year. In 1943 and 1944 he served as Chief of the Surgical Staff and during 1945 and 1946 was Chief of Staff of St. Joseph's Hospital.

Paul Emile Laflamme was a Certificate in Surgery of the Royal College of Surgeons (Can.), and a member of the Ontario College of Physicians and Surgeons and of the Newfoundland Medical Board. An Associate Member of the International College of Surgeons, Canadian Section, he will be missed by his friends and colleagues.

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Section II

Bulletin of Meetings—Announcements

National and International Activities

Vol. XXIII *February, 1955* No. 2

INTERNATIONAL COLLEGE OF SURGEONS

SCHEDULE OF MEETINGS

INTERNATIONAL—NATIONAL—REGIONAL

INTERNATIONAL

1955

March 26-27	National Reunion of French Section	Niort, France
May 23-26	Twentieth Anniversary Meeting	Geneva, Switzerland
Oct. 13-16	Third Congress, Brazilian Section	Belo Horizonte, Brazil
Oct. 22-23	Meeting of Austrian Section	Vienna, Austria
Oct. 30	Second Congress, Japanese Section	Tokyo, Japan

NATIONAL: UNITED STATES AND CANADIAN SECTIONS

Sept. 12-15	Convention Hall	Philadelphia, Pennsylvania

REGIONAL

Feb. 27-March 1	Shamrock Hotel	Houston, Texas
March 25	Statler Hotel	New York City, New York
July 1-4	Chatham Bars Inn	Cape Cod, Massachusetts
To be announced	Hotel Utah	Salt Lake City, Utah

1956 NATIONAL: UNITED STATES AND CANADIAN SECTIONS

Sept. 9-13	Palmer House	Chicago, Illinois

1957 NATIONAL: UNITED STATES AND CANADIAN SECTIONS

Sept. 8-12	Palmer House	Chicago, Illinois

1958 NATIONAL: UNITED STATES AND CANADIAN SECTIONS

Sept. 7-11	Atlantic City, New Jersey

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Section II

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National and International Activities

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FOUNDED BY DR. MAX THOREK

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Section II

Bulletin of Meetings—Announcements

National and International Activities

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President's Page

During the seven years that I have been a member of the College, regional meetings have been held in the following cities: Pittsburgh, Kansas City, Tulsa, Oklahoma City, Indianapolis, Birmingham, West Palm Beach, St. Louis, Chicago, Poughkeepsie, Boston, Denver, Colorado Springs, and Knoxville. The 1955 meetings are to be held in Washington, D. C., Houston, and Cape Cod. Possibly I may have overlooked one or more meetings, as it has not been possible to attend them all.

In addition to these regional meetings there have been many local and state gatherings. For example, in Florida I have attended several splendid affairs in Miami and Orlando, at which surgeons from all over the state got together for a short medical program and social function. The Regents, **Drs. George Ferre** and **Eugene Jewett,** have sponsored some of these gatherings. California, because of its great size and large membership, has for some time held regular meetings several times a year, and recently a joint session of the northern and southern groups was held at Bakersfield. Wisconsin regularly has a meeting consisting of a dinner and a short program the night before the annual meeting of the State Medical Society, in addition to another clinical session at the hospital with which one of its members is affiliated. This plan is now being explored by other states, as it also affords an opportunity for the state Credentials Committee to meet and consider applications.

New York City, because of its large medical population, has several meetings during the year under the able direction of **Dr. Horace Ayers.** Alabama with such leaders as Regent **Dr. James Morgan,** immediate past president of the State Medical Society, **Dr. Gilbert Douglas,** and other members of the College, has had one or more annual meetings. The same is true of Indiana, where **Dr. George Garceau,** Professor of Orthopedic Surgery at the

Dr. Arnold S. Jackson, F.A.C.S., F.I.C.S.

Indiana Medical School, is Regent. Here also **Dr. Thomas Noble** and others have been active. Regent **Dr. Kenneth Sawyer,** Denver, has organized many meetings in Colorado. Some are purely social; others are combined medical and social functions.

With the appointment of the new Regents and Vice-Regents complete, as well as those of the 500 Credentials Committee members, there should be an incentive now for all states to have at least one annual session. These meetings will not only serve to acquaint the members with one another, they will promote a feeling of good fellowship and stimulate scientific endeavor and the dissemination of surgical developments. The incentive must come from the regents and other state officers, and your President hopes that his plan may be put into effect in all states during his term of office.

The regional meetings serve the same purpose in a larger sense. As will be seen by the map on Page 59, the country has been divided into regions and the states grouped accordingly. These divisions are not necessarily fixed, and in certain instances it may be advisable to not follow the boundaries. This might be the case when there are large centers of population, or perhaps large sparsely settled areas.

For the past several years I have devoted considerable time to assisting local groups in planning and developing these meetings, and I believe they are an important factor in the development of the College. Because of the great distances involved, it has often been impossible for many of our members to attend the annual session, so we have tried to carry the College to them and encourage them to take part in the regional programs. It is not possible to find places for many of our members on the "star studded" annual Congress programs, but the regional meetings give our members-at-large an opportunity to share their talents and, perhaps, to pave the way for a place on the Congress program.

It has been customary for the Regent from the host state to invite the Regents from surrounding states to preside at a session or take part in the program. The national officers have made every effort to attend these meetings and to present papers or discuss the affairs of the College.

Such meetings need not be held in large cities. For instance, two of the finest I have attended were in West Palm Beach and in Poughkeepsie. The former session was conducted under the able leadership of Vice-Regent **Dr. Lloyd Netto** and his talented wife. Surgeons from over twenty states registered at this gathering. The meeting held last June at Poughkeepsie, New York, with **Dr. Max Simon** as general chairman and **Dr. Frank Gagen** as program chairman, was a splendid affair.

Out in Wyoming, Regent **Dr. Andrew Bunting** has conducted several meetings. During the year 1956-57 I have planned several meetings in various parts of the country, and as soon as details concerning hotels and meeting sites have been completed, this information will be made available. In the meantime, all members residing in the area where such meetings are held should make every effort to attend and lend their support to those in charge. Following the Washington, D. C. session, to be held under the direction of Regent **Dr. James W. Watts,** Professor of Neurosurgery at George Washington University Medical School, is the Southwestern Division regional meeting at Houston, with **Dr. Herbert Hayes** as chairman. Then comes the holiday meeting to be held over the Fourth of July weekend at the Chatham Bars Inn at Chatham, Massachusetts, where Regent **Dr. Leopold Brodny** has been at work for a year planning a combined scientific and social affair on beautiful Cape Cod. An entire hotel has been engaged for the meeting, which should be well attended and which will afford members from other sections of the country a chance to visit scenic New England.

I shall appreciate hearing from any member who has ideas with regard to either state or regional meetings, and I should especially like to hear from those who will sponsor a meeting. The time is now right for our Canadian members to be thinking along these same lines and to sponsor at least two meetings in 1956.

ARNOLD S. JACKSON, M.D.
President, United States Section
International College of Surgeons

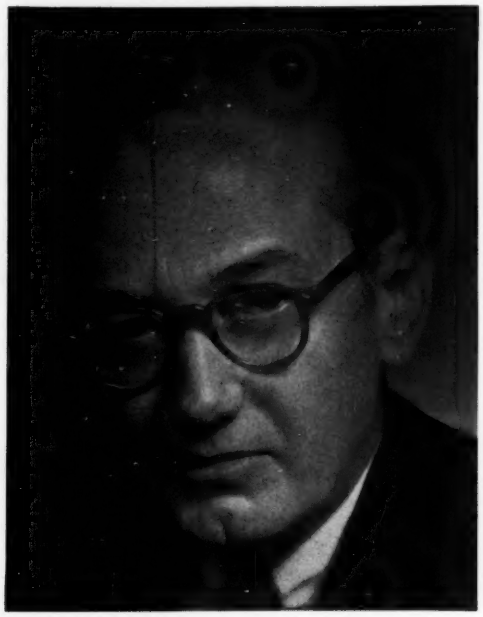
Pen Portraits of Distinguished Fellows

CHEVALIER L. JACKSON, M.D., F.A.C.S., F.I.C.S.

Dr. Chevalier L. Jackson was born in Pittsburgh, Pennsylvania, in 1900. After taking his B.A. degree at the University of Pennsylvania in 1922, he entered the School of Medicine of that University and received his M.D. degree four years later. He began his work in his father's specialties, laryngology and bronchoesophagology, and has achieved a position in those branches of surgery that rivals his father's status in the same fields. In 1930 he received his Master's degree in Medicine from the University of Pennsylvania.

Dr. Jackson is Professor of Laryngology and Bronchoesophagology at Temple University in Philadelphia and Visiting Lecturer on Bronchoesophagology and Laryngeal Surgery at the Graduate School of Medicine of the University of Pennsylvania; Bronchoscopist at Lankenau Hospital, Chestnut Hill Hospital, Rolling Hill Hospital, and Eagleville Sanatorium. He is also an Honorary Member of the Faculty of the University of Chile; an Honorary Professor of the Medical Faculty of the University of Montevideo in Uruguay, and a member of the Advisory Board in America of the American Hospital of Paris.

A member of many medical societies in the United States and abroad, Dr. Jackson has been President of the American Bronchoesophagological Association; of the American College of Chest Physicians, and of the Laennec Society of Philadelphia. He is Vice President of the Philadelphia Laryngological Society and has held many other offices including that of Vice President of the American Academy of Ophthalmology and Otolaryngology; Secretary of the Pan American Medical Association and of the Pan American Association of Otolaryngology and Bronchoesophagology, and Founder and Secretary-Treasurer of the International Bronchoesophagological Society. He is a Fellow of the American College of Surgeons and of the International College of Surgeons.

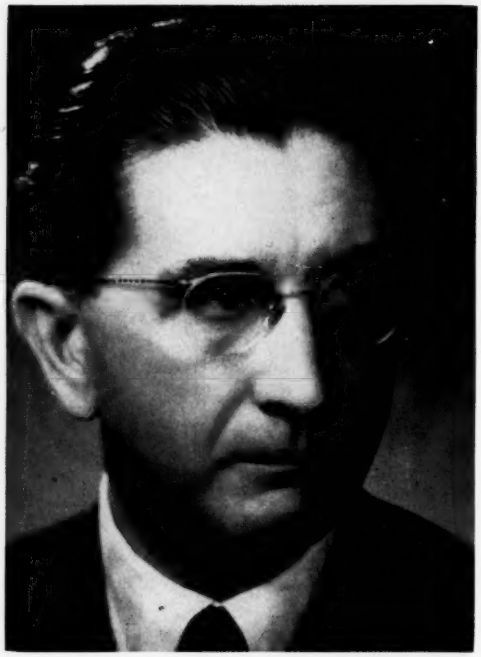


Chevalier L. Jackson, M.D., F.A.C.S., F.I.C.S.

In spite of his brilliant and extremely busy career, Dr. Jackson finds time for a variety of outside interests. Outstanding among his nonprofessional interests is his work with the Philadelphia Civic Grand Opera Company, which he helped found in 1950 and of which he is President. This organization recently gave him the First Citizen Award.

A humanitarian, an internationalist and a leader in his chosen fields of surgery, Dr. Chevalier L. Jackson is an outstanding example of personal dignity and professional prowess to the medical profession and to laymen throughout the world.

PROF. F. E. GODOY MOREIRA, M.D., F.A.C.S., F.I.C.S.



Prof. Francisco E. Godoy Moreira, M.D., F.A.C.S., F.I.C.S.

After taking a B.S. degree in 1916 at the Colegio Arquidiocesano in São Paulo, Prof. Francisco E. Godoy Moreira entered the School of Medicine and Surgery in São Paulo, the degree of Doctor of Medicine being conferred upon him by that institution six years later. He interned at the Primeira Clinica Cirurgica of São Paulo under the direction of Prof. Aloysius C. Ferreira de Camargo, M.D., F.I.C.S., from 1921 to 1922.

In April 1923 he went to Europe for postgraduate study in orthopedic surgery. Returning to São Paulo in January 1926, he started an orthopedic clinic and began work at the Santa Casa de Misericordia. He also served as a specialist in orthopedics at the Children's Hospital of the Brazilian Red Cross in Indianapolis, S.P., and Hospital Humberto I. in the City of São Paulo. From 1926 to December 1930 he was Assistant Professor of Orthopedics and Children's Surgery at the School of Medicine of São Paulo, under the direction of Prof. Rezende Puech. In 1932 he was appointed head of the Department of Orthopedic Surgery in the Military Hospital of São Paulo. He founded the Orthopedic Institute in 1933 and now has two full time assistants serving there. The Institute has become a fully equipped study and research center in orthopedic surgery. Dr. Morèira became Chief of the Orthopedic Department of the Maternity Hospital of São Paulo in 1934, Assistant in the Orthopedic and Traumatologic Department of City Hospital in 1936 and is now Professor in Orthopedics at the University of São Paulo, where he has founded and constructed an Orthopedic Hospital.

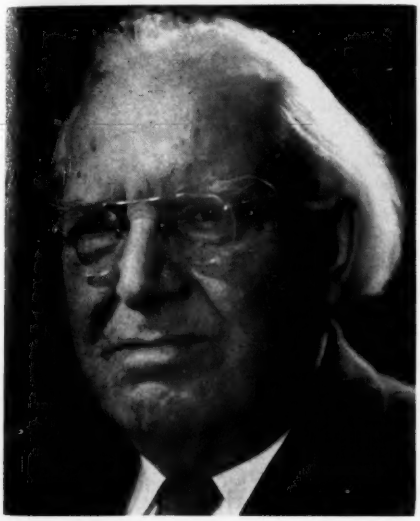
Dr. Moreira is a member of many organizations of his own country and others. He is a Fellow of the British Orthopedic Association; the American College of Surgeons; the Italian Orthopedic Association; the Academy of Surgeons of Mexico, and the Academy of Surgeons of Peru. He is an Honorary Member of the American Academy of Orthopedic Surgeons and, among many other organizations, is a member of Pan-American Medical Association; the Sociedade de Medicina e Cirurgia of São Paulo; the Associação Paulista de Medicina; the Sociedade Brasileira de Ortopedia e Traumatologia, which he served as Vice-President; the Colegio Brasileiro de Cirurgiões; the Deutsche Ortopädische Gesellschaft; the Société Française d'Orthopédie, and the Société Internationale de Chirurgie Orthopédique et Traumatologie.

Dr. Moreira's eminence in the field of orthopedic surgery, his personal integrity, his devotion to every task he undertakes and his many additions to the literature on orthopedics and allied surgical services has made him an outstanding figure in the international surgical world. His ardent support of the ideals and principles for which it stands has made him an active supporter of the International College of Surgeons.

United States and Canadian Sections

Tribute Paid to Dr. Olaf Jenson Hagen

Olaf Jenson Hagen, M.D., F.A.C.S., F.I.C.S., was saluted as "one of America's foremost physicians, educators and humanitarians" in an article written by **Dr. J. Arthur Myers,** F.A.C.P., for *Everybody's Health* (April, 1953).



Olaf Jenson Hagen, M.D., F.A.C.S., F.I.C.S.

Dr. Hagen was born in Menomonie, Wisconsin, when the area was an open frontier with vast expanses of waving prairie grass, wandering Indian tribes and pioneers living in a few sod or log huts. From this rugged background, by study and the sheer hard work necessary just to keep alive, he rose to become an educator of note, a general practitioner who delivered over 1,500 living babies in the Moorhead area of Minnesota, a radiologist, an eminent surgeon and a Public Health official.

Early in his medical career he joined with a group of other physicians to found the Fargo Clinic and in 1916, with **H. Longstreet Taylor,** opened the Sand Beach Sanatorium at Lake Park, Minnesota. He has been recognized for his achievements in medicine both nationally and internationally, and in 1951 was given the "Outstanding Achievement Award" of the University of Minnesota.

In 1941 **Dr. Hagen** was elected to fellowship in the International College of Surgeons at Mexico City and served as a regent of the United States Section for ten years. His professional abilities and intense personal interest have made him an honored member of the College and a medical leader both in his own community and in the international field. The College joins **Dr. Myers** in his tribute to this active and able veteran of medicine.

New York State Surgical Division Honors Dr. Dan Mellen

The New York State Divisional Meeting will be held in New York City at the Statler Hotel on March 25, 1955, according to **Dr. Henry M. Scheer,** F.A.C.S., F.I.C.S., Chairman of the Division.

Dr. Horace E. Ayers, F.A.C.S., F.I.C.S., and other members of the committee have planned a full day of scientific meetings which have been scheduled as follows:

FRIDAY, MARCH 25, 1955
ORTHOPEDIC SURGERY

General Chairman: **Dr. Henry Milch,** F.A.C.S., F.I.C.S., New York University

Infections of Bones and Joints **10:00-10:20 a.m.**

Joseph Buckman, M.D., F.A.C.S., F.I.C.S., Assistant Clinical Professor, Orth. Surgery, New York University (Post Graduate Course), Attending Orthopedic Surgeon at Hospital For Joint Diseases and Orthopedic Surgery

Bone Tumors **10:25-10:45 a.m.**

Norman L. Higginbotham, M.D., Surgeon to Memorial Center for Cancer Research, Co-Author on Book of Bone Tumors

Reconstruction Surgery of the Thumb **10:50-11:10 a.m.**

J. William Littler, M.D., Attending Surgeon, Roosevelt Hospital; Former Member of Surgical Team on Hand Surgery, Valley Forge, N. Y.

Fractures of the Pelvis 11:15-11:35 a.m.
John C. McCauley, M.D., F.A.C.S., Assistant Professor of Orthopedic Surgery, N. Y. State University and Bellevue Hospital, New York City

Complicated Fractures of the Spine 11:40-12:00 Noon
Otho C. Hudson, M.D., F.A.C.S., F.I.C.S., Chief Orthopedic Surgeon, Nassau and Meadowbrook Hospitals

Shoulder Pain 12:00-12:15 p.m.
Robert Warren, M.D., F.A.C.S., Assistant Clinical Professor of Orthopedic Surgery, N. Y. State University; Attending Orthopedic Surgeon, Bellevue Hospital, New York City

UROLOGY (PANEL)

Moderator: **Louis Rene Kaufman,** M.D., D.U., F.A.C.S., F.I.C.S., Professor of Surgery, New York Medical College, New York City, New York

Urological Problems Presenting as Sequelae of Crushing Injuries of Spine and Pelvis

Panel Discussion: The Neurogenic Bladder

Studies of Urinary Incontinence
Dr. Francis A. Beneventi, Associate Attending Urologist, New York Hospital, St. Clair, Lincoln and Polyclinic Hospitals, New York City

Surgical Urological Emergencies
Dr. Thomas J. Kirwin, D.U., F.A.C.S., F.I.C.S., Professor of Urology, New York Medical College, Director of Urology, Flower-Fifth Avenue and Metropolitan, Bird S. Coler Hospitals, New York City

The Management of Rupture of Bladder and Urethra
Dr. John E. Heslin, D.U., F.A.C.S., Professor of Urology, Albany Medical College, Director of Urology, Albany Hospital, Albany, New York

Urological Complications of Long Immobilization
Dr. John E. Heslin, D.U., F.A.C.S., Professor of Urology, Albany Medical College, Director of Urology, Albany Hospital, Albany, New York

Prevention and Management of Urethral Injuries in Surgery
Dr. Samuel Simon, D.U., F.A.C.S., F.I.C.S., Urologist, Vassar Brothers Hospital and St. Francis Hospital, Poughkeepsie, New York
Dr. Robert S. Hotchkiss, D.U., Professor & Chairman, Dept., Urology, New York University

A social evening will follow the scientific part of the program. A cocktail hour will precede a banquet, which will be given by the New York Division as a tribute to **Dr. Dan Mellen,** F.A.C.S., F.I.C.S., Rome, New York, the outgoing President of the Medical Society of the State of New York.

Mrs. Clifton L. Dance, who was a member of the Entertainment Committee of the Woman's Auxiliary at the Nineteenth Annual Congress of the International College of Surgeons in Chicago, Illinois, last September, has been named chairman of the Ladies' Reception Committee to arrange for the entertainment of the women who will attend this meeting. The committee will also assist in the arrangement of the evening social events.

The Division invites all surgeons and members of allied professions to attend this meeting. Further information may be obtained by writing **Dr. Henry M. Scheer, 522 West End Avenue, New York City 24, New York.**

Dr. Henry H. Kessler Appointed to Council

Henry H. Kessler, M.D., F.A.C.S., F.I.C.S., medical director of the Kessler Institute for Rehabilitation in West Orange, New Jersey, who recently received the Albert Lasker Award for distinguished service to the physically disabled, is one of the twelve members appointed by **Oveta Culp Hobby,** Secretary of the U. S. Department of Health, Education and Welfare, to the newly formed National Advisory Council on Vocational Rehabilitation established under the Vocational Rehabilitation Act of 1954.

Mary E. Switzer, Director of the Office of Vocational Rehabilitation, will serve as chairman of the Council, which is authorized under the law to review or to recommend initiation of application for grants for special projects which show promise of making valuable contributions to the vocational rehabilitation of the physically handicapped.

If all members have the ability and integrity of **Dr. Kessler,** the Advisory Committee will be outstanding in its devotion to the cause it has been created to serve.

Mrs. **Hobby** and the government could not have made a better choice in the selection of personnel for this important service to the handicapped.

Southern California Surgical Division of the College Holds Annual Meeting

The annual meeting of the Southern California Surgical Division of the U. S. Section of the International College of Surgeons was held Thursday, Dec. 2, 1954, at the Mayfair Hotel in Los Angeles, California, according to the announcement of **Dr. Ross V. Parks,** F.I.C.S., Secretary-Treasurer of the Southern California Division.

The meeting opened with a social hour followed by a dinner in the Rainbow Isle, Mayfair Hotel. A large number of members were present and participated in the excellent meeting which followed.

Dr. William H. Bachrach, Associate Professor of Physiology at the University of Southern California Medical School read an outstanding paper, *Applied Physiology of the Gastrointestinal Tract,* presenting to those attending his experience and knowledge of this subject, which is of interest to both general surgeons and specialists in the gastrointestinal field.

At the business meeting the following officers were unanimously elected:

President, **Dr. Malcolm R. Hill,** 1216 Wilshire Boulevard, Vice President, **Dr. Emmet A. Pearson,** 1401 S. Hope Street and Secretary-Treasurer, **Dr. Ross V. Parks,** 1930 Wilshire Boulevard, all of whom live in Los Angeles. After the election of officers, the meeting was adjourned.

Among those attending the meeting were a number of women, many of whom are members of the Woman's Auxiliary which takes a more and more effective interest in the activities of the college.

LA PRESSE MEDICALE

La Grand Journal Français de Chirurgie et de Medicine parait chaque semaine, et donne toutes les informations scientifiques et professionelles

ABONNEMENT

$17.00 par an.

Priére d'envoyer directement le montant de l'abonnement à:

LA PRESSE MEDICALE, Masson et Cie, éditeurs

120 Boulevard St. Germain Paris VI, France

Austrian Section

The American Medical Society of Vienna announces a series of seminar congresses in surgery; otorhinolaryngology; neuro-otologic diseases and their presurgical aspects; speech rehabilitation with special reference to laryngectomized patients; anatomy of the facial nerve; trauma: operative approach and repair; ophthalmology; internal medicine; orthopedic and traumatic surgery; neurology and psychiatry; radiology; dermatology and syphilology; pathology, and obstetrics and gynecology, to be given by the surgical and medical faculties of the University of Vienna.

The following program has been scheduled:

February 1-3:
- Tumors of the Eye
- External Diseases of the Eye
- Fundus Microscopy

March 1-3:
- Anatomy of the Orbit and Adnexa
- Indirect Ophthalmoscopy Gross Pathology

March 3-5:
- Hematology
- Heart Diseases
- Electrocardiology

April 3-9:
- Neuro-Otologic Diseases and Their Pre-Surgical Aspects
- Speech Rehabilitation with Special Reference to Laryngectomized Patients
- Anatomy of the Facial Nerve Trauma, Operative Approach and Repair

April 5-7:
- Histology of the Eye
- Histopathology of the Eye
- Ocular Muscle Anomalies

April 7-9:
- Allergy-Arthritis

April 21-23:
- Vaginal Operative Approach to Pelvis

May 2-4:
- Anatomy of the Temporal Bone
- Surgical Anatomy of the Nose
- Surgical Anatomy of the Sinuses

May 3-5:
- Thoracic Surgery
- Ocular Motility
- Refraction
- Perimetry

May 5-7:
- Heart Diseases
- Cardiovascular Diseases
- Peripheral Vascular Diseases

May 9-11:
- Dermopathology
- Dermatologic Histopathology
- Demonstrations

May 10-12:
- Psychosomatic Medicine
- Psychopathology
- Psychodynamics

May 12-13:
- Histologic Pathology

May 17-18:
- Treatment of Congenital Orthopedic Deformity

May 19-21:
- Gynecological Pathology
- Gynecological Endocrinology
- Gynecological Cytology

May 26-28:
- Diagnosis, with Selected Practical Demonstrations

June 2-4:
- Cardiology
- Electrocardiology
- Vectocardiography; Ballistocardiography

June 6-8:
- Gastrointestinal Surgery
- Nasal Allergy
- Pediatric Otolaryngology
- Surgical Treatment of the Parotid Glands

June 7-9:
- Plastic Surgery of the Eye
- External Diseases of the Eye
- Glaucoma

June 21-22:
- Fractures of the Extremities

June 23-25:
- Manikin Obstetrics

July 4-6:
- Cardiovascular Surgery
- Bronchoesophagology
- Endoscopy
- Malignant Disease in Otorhinolaryngology

July 5-7:
- Slit Lamp Microscopy
- Ophthalmoscopy
- Ocular Therapeutics

July 7-9:
- Diabetes
- Diseases of the Liver and Biliary Tract
- Hypertension and Nephritis

July 11-13:
- Superficial Mycoses
- Deep Mycoses
- Demonstrations

July 12-14:
- Neurology (Neuropathology)
- Electroencephalography
- Electromyography

July 14-15:
Gross Pathology
July 19-20:
Rehabilitation
July 21-23:
Gynecology
Oncology
Female Urology
July 28-30:
Therapy, with Selected Practical Demonstrations
August 1-3:
Operative Otology
Surgical Treatment of the Larynx
Surgical Treatment of the Neck
August 2-4:
Electrosurgical Treatment of the Eye
Ocular Cataracts
Retinal Detachment
August 4-6:
Endocrinology
Metabolism
Fluid and Electrolyte Balance
August 8-10:
Neurosurgery
August 23-24:
Surgical Treatment of Joints
August 25-27:
Sterility
Fertility
Hormone Therapy
September 1-3:
Gastroscopy
Gastroenterology
Proctology
September 5-7:
Urologic Surgery
Fenestration
Tympanoplasty
Rehabilitation of the Hard of Hearing
September 6-8:
Operative Ophthalmology
Gonioscopy
Anomalies
September 12-14:
Burns
Dermatology
Demonstrations
September 13-15:
Psychoanalysis
Psychotherapy
Psychiatry
September 15-16:
Surgical Pathology
September 20-21:
Intramedullary Nailing
September 22-24:
Surgical Obstetrics
Manikin Obstetrics
Operative Gynecology
September 28-30:
General Radiology, with Selected Practical Demonstrations
October 3-5:
Surgical Treatment of the Nasal Septum
Reconstructive Surgery of the Nose and Ear
Cosmetic Surgery of Head and Neck
Surgical Treatment of Liver and Gallbladder
October 4-6:
Neuro-Ophthalmology
Diseases of the Retina
Physiology of the Eye
October 6-8:
Hematology
Normal Peripheral Blood and Bone Marrow
Diseases of Blood and Blood-Forming Organs
October 11-13:
Child Psychiatry
Marital Problems
Behavior and Brain Function
October 13-14:
Cancer
October 18-19:
Cranial and Spinal Injuries
October 27-29:
Gynecologic Surgery
Wertheim Approach
Obstetric Surgery
November 3-5:
Diseases of the Chest
Tuberculosis
Malignant Diseases
November 7-9:
Syphilology
Allergic Skin Diseases
Demonstrations
Plastic and Oral Surgery
Acute Sinusitis
Chronic Rhinitis
Surgical Anatomy of Nose and Accessory Sinuses
November 8-10:
Ophthalmic Medicine
Diagnostic Examination
The Ocular Adnexa (Selected Topics)
November 22-23:
Surgical Treatment of the Hand
November 24-26:
Practical Demonstrations in Diagnosis and Therapy

For additional information concerning this schedule or for registration please direct all correspondence to the Executive Secretary, The American Medical Society of Vienna, 1. Vienna, Universitaetsstrasse 11, Vienna, Austria, or cable "Ammedic," Vienna.

Costa Rica Section

President of Costa Rica Section Takes Post as Minister to Italy

The Costa Rica Section of the International College of Surgeons, through its Secretary, **Dr. José Maria Ortiz Céspedes,** announces that its President, **Dr. José Angel Coto Garbanzo,** has been appointed Minister to Italy from Costa Rica and must relinquish his organizational duties two months prior to the expiration of his term of office. His duties during this time will be assumed by the Vice-President, **Dr. Marino Urpi Rodrigues.**

The Section, in gratitude for the brilliant achievements of **Dr. Cota** as President, unanimously desires that the salient points of the Presidential farewell address be shared, through the pages of the *Bulletin,* with colleagues of other Sections throughout the world. Substantially, **Dr. Coto** spoke as follows:

"My new duties as Minister to Italy oblige me, with infinite regret, to give up my duties as President of our Section . . . The activities of our group remain in the capable hands of our Board, to whom I am grateful for the honor they have conferred upon me.

"During the two-year period now approaching its end we have held eleven meetings of the Executive Board, whose members, in the true spirit of our organization, have faithfully responded to every call upon them. Our membership has been augmented by the accession of a number of distinguished Fellows and Honorary Fellows; among them, to name but a few, **Drs. Benjamin Hernandez Valverde, Antonio A. Facio Ulloa, Esteban Alfonso Lopez Varela, Alejandro Gonzales Lujan** and **Fernando Saborio Esquivel.** It has been my suggestion that **Dr. Vincente Castro Cervantes** be named by this body as an honorary member also.

"We have offered scholarships for roentgen and clinical laboratory technicians; and for doctors who wish to specialize in anesthesiology and roentgenology, respectively . . . We should like also to report the return of **Dr. Juan Guillermo Ortiz Guier,** a holder of one of our former scholarships, to the American Hospital, Chicago. The International Secretary has reported favorably on the work of this colleague, which gives us much pleasure.

"Scientific motion picture films have been obtained from the International Secretariat and shown at our regular meetings, at the Medical Studies Center, at a meeting of the College of Doctors and Surgeons of Costa Rica and at the Central Hospital of the Costa Rica Security Bank.

"A scientific paper by **Drs. Guzmán** and **Guzmán,** "The Enzymatic Débridement of Suppurations, Necrotic Lesions and Burns with Papain," was awarded first prize in the recent International Congress of Plastic Surgery in Mexico City.

"We were invited to the Rome Congress (as guests of the Italian Section); to the Second Brazilian Congress and the First International Congress in that country, and to the inauguration of the International Surgeons' Hall of Fame in Chicago, to which we named as our official delegates **Drs. Facio** and **Antillon.**

"We mourn the demise of one of our most beloved members, **Dr. Constantino Herdocia Terán,** whose work in the Faculty of Medicine, in the Carlos Duran Hospital and in the Hospital of San Juan de Dios is known by all. He will be sorely missed among us. The condolences of our Section have been sent to the bereaved.

"If there is any value in the work accomplished during the period I have analyzed," the speaker concluded, "the credit belongs to the Board and to those other members who made possible the discharge of our obligations."

The spirit of cooperation and service reflected in **Dr. Coto's** address is characteristic of the membership of the Costa Rica Section. The International College congratulates **Dr. Coto** on his new and merited honors and extends to the Section its warmest good wishes for continued progress.

French Section

Meeting in Bordeaux

A number of scientific papers of importance were presented at a recent meeting of the local division of the French Section, International College of Surgeons, held at the headquarters of the Surgical Society of Bordeaux under the chairmanship of **Prof. Pierre Laumonier,** M.D., F.I.C.S. Among the eminent surgeons who made these presentations were **Prof. Albert Lentzer,** M.D., F.I.C.S., of Geneva, Switzerland; **Prof. J. Soler-Roig,** M.D., F.I.C.S., of Barcelona, Spain, and **Prof. Antonio Puigvert Gorro,** M.D., F.I.C.S., also of Barcelona.

The program included an operative session with surgical demonstrations, held at the Hôpital du Tondu by **Prof. Raymond Darget,** M.D., F.I.C.S. Impressive as are all of Prof. Darget's surgical sessions, these demonstrations added the final satisfying touch to an already impressive occasion.

Meeting Scheduled in Niort

A meeting of the French Section of the International College of Surgeons for Southern France will take place on March 26 and 27 in the surgical center of Niort. The President of the French Section, **Prof. Andre Ameline,** M.D., of Paris, will act as Chairman. The Co-Chairman will be **Prof. Marcel Thalheimer,** M.D., Vice-President of the Section.

The program will include papers and discussions on surgical problems and on the present status of antibiotics. This part of the program will be followed by a presentation of surgical films.

Haiti Section

French-speaking Countries of Caribbeans hold Third Medical Congress in Haiti

The Third Medical Congress of the French-speaking Countries of the Caribbeans was held in Port-au-Prince, Haiti, in December 1953, the sessions lasting from the 15th to the 19th inclusive.

The membership of this association comprises physicians and surgeons of Martinique, Guadeloupe, French Guiana and Haiti. These countries were all settled originally by the French. The first three have the status of colonies, while Haiti is an independent Republic, having thrown off the French yoke in 1802. It maintains, however, close ties with France educationally and culturally. French is the official language of all four countries.

More than thirty-five papers were read. These are reported in full in the 350-page bulletin issued by the Haitian Medical Association under the editorship of **Dr. Constant Pierre-Louis,** Secretary of the Haitian Section of the International College of Surgeons, and have been translated by **Dr. Ulysses G. Dailey,** F.A.C.S., F.I.C.S., for appearance in the current issue of the Journal (P. 268). The presentations faithfully mirror the thinking, the practices, and the problems of this group of medical men.

Addresses were made at the opening ceremonies by **Dr. Pierre-Louis,** by the President of the Republic of Haiti, **Gen. Paul E. Magloire,** by **M. Roger de Bercegol de Lile,** French Ambassador to Haiti, **Dr. Charles St.-Cyr** of the delegation of Martinique, **Dr. R. Boisneuf** of the Guadeloupe delegation, and **Professor Stanislas de Seze,** Professor of Surgery, University of Paris, representing France.

At the closing banquet, **Professor de Seze, Drs. U. G. Dailey** (in absentia), **St.-Cyr, Boisneuf** and **Montestruc** received the Diploma of Honorary Membership in the Haitian Medical Association. **Prof. de Seze** and **Dr. Dailey** were decorated by the Haitian Government with the grade of Officer of the Order of Honor and Merit. The addresses and papers read were all in French.

Indian Section

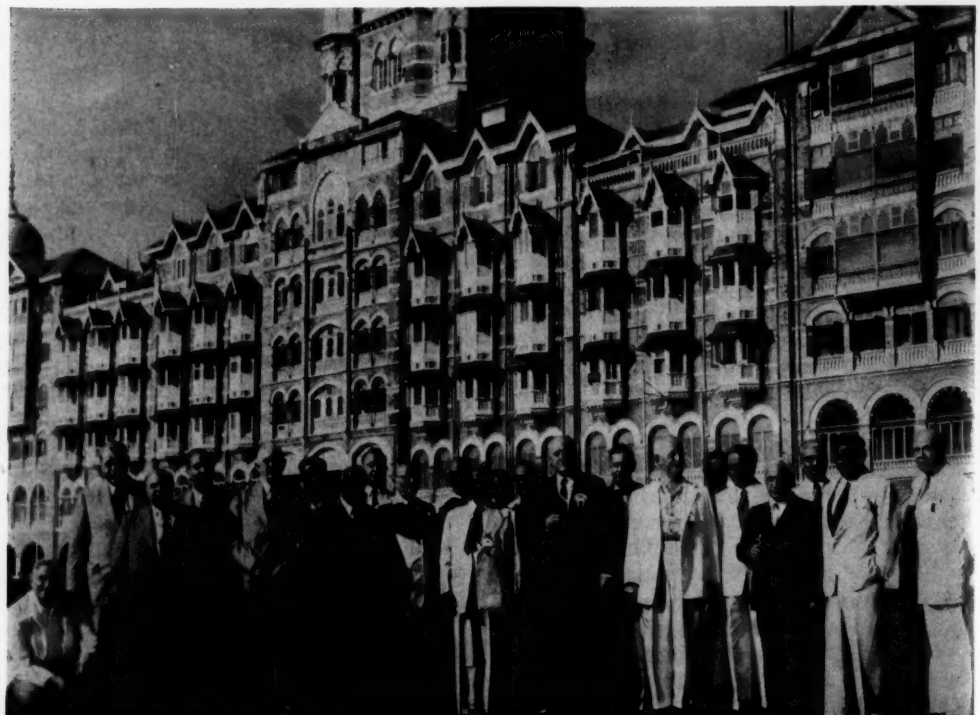
Indian Section Holds Biennial Meeting in Bombay

The Indian Section of the International College of Surgeons held its biennial meeting in Bombay, India, from November 10 to 12, 1954. A group of members from the United States Section were welcomed as honored guests at this meeting.

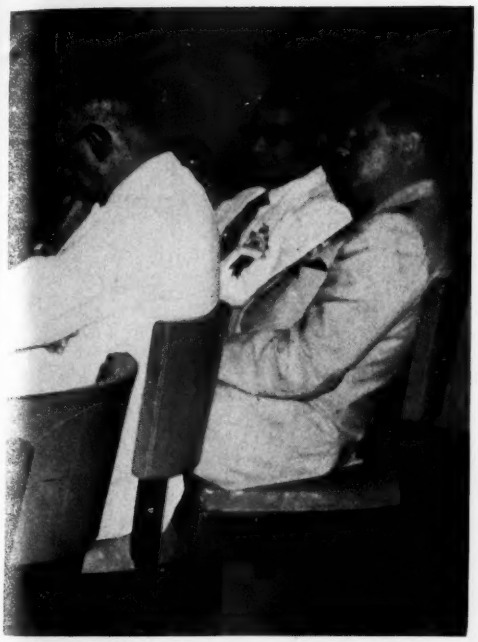
Arriving at the airport after an eight hour flight on Air-India from Bangkok, Thailand, the party from the United States was greeted by **Prof. R. N. Cooper,** M.D., F.R.C.S., F.I.C.S., President of the Section, and his reception committee.

All the scientific meetings were held in the ballroom of the Taj Mahal Hotel, which was headquarters for the session. **Dr. Annappa V. Baliga,** F.R.C.S. (Eng.), F.I.C.S., opened the session with an address greeting the members and guests present. **Dr. C. S. Patel,** President of the Medical Council of India, addressed the assembly, discussing health problems in India today. A number of outstanding papers were presented by the Indian doctors, proving the giant strides that have been made by these men in the development of modern medicine in recent years.

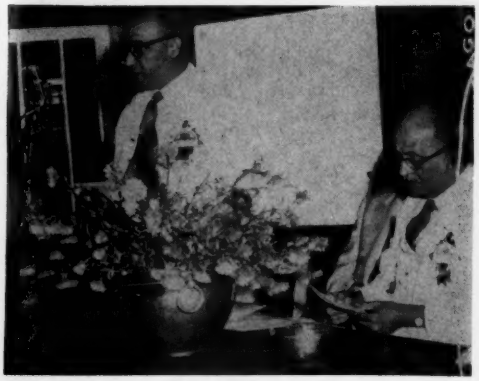
The unusually large number of women doctors present was accounted for by the early cultural taboo on the examination of women by male doctors. This social



Officers of India Section of International College of Surgeons and Visiting Surgeons from U. S. Section in front of the Taj Mahal Hotel in Bombay, India.



Left to right, Drs. Cooper, Bacon and Baliga

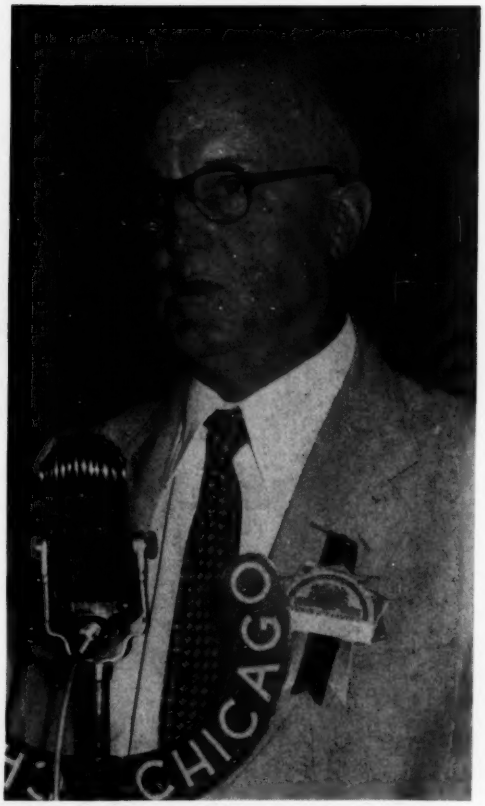


Dr. Baliga delivering opening address at Congress in India.

prejudice has resulted in the training of many excellent women obstetricians and gynecologists who are now able to take their place at these meetings and who have become an effective factor in the dissemination of medical practices and modern sanitation principles throughout India.

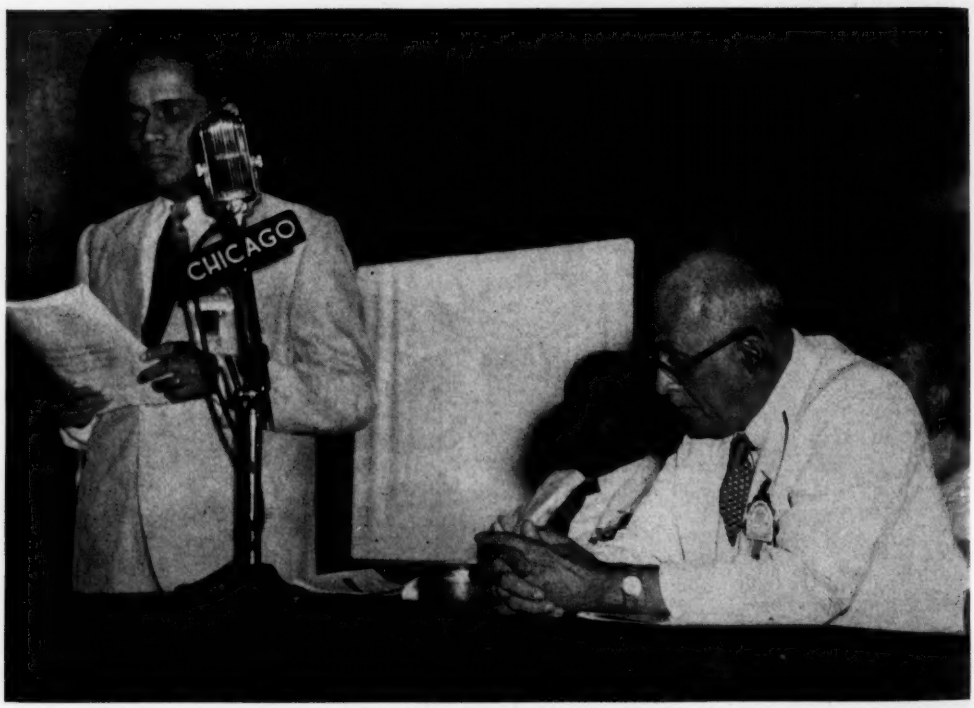
The report by **Dr. V. P. Mehta**, F.R.C.S., F.I.C.S., Secretary of the Indian Section of the International College of Surgeons, proved that this has become one of the most enthusiastic groups in the College. The members are not only leaders in the medical field but in government as well. Their positions have led to the rapid growth of the country and its ever-quickening advances in modernization.

In addition to the papers presented by the members of the Indian Section, the surgeons from the United States also presented articles on outstanding subjects of interest to the general surgeon as well as to the specialist. All the lectures were enthusiastically received by audiences that filled the lecture rooms, often as many as 500 listeners being present.

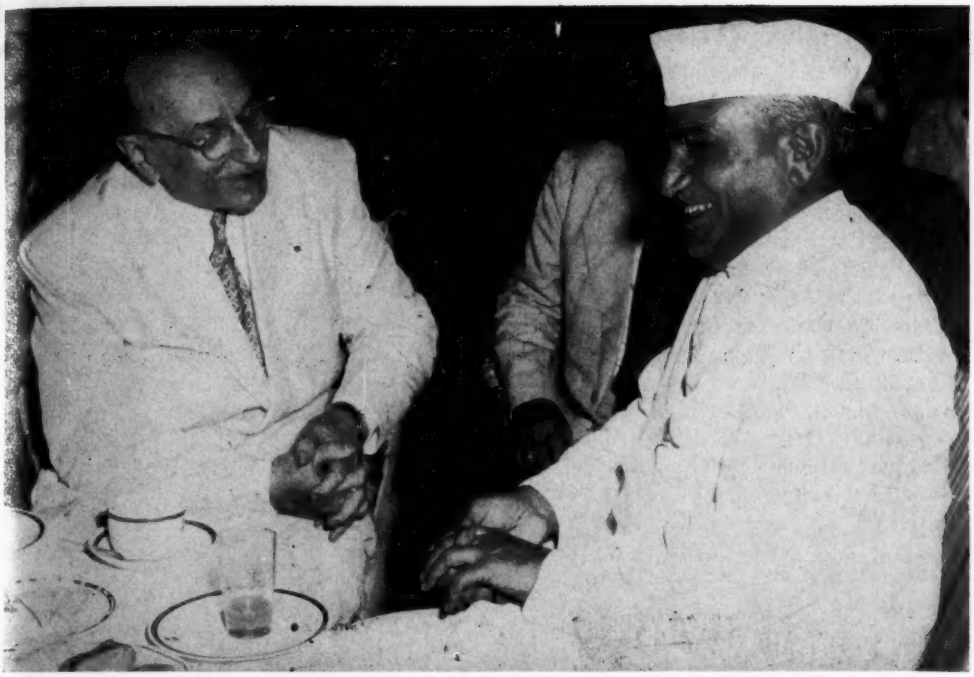


Dr. Henry W. Meyerding addressing meeting of Indian Section in Bombay.

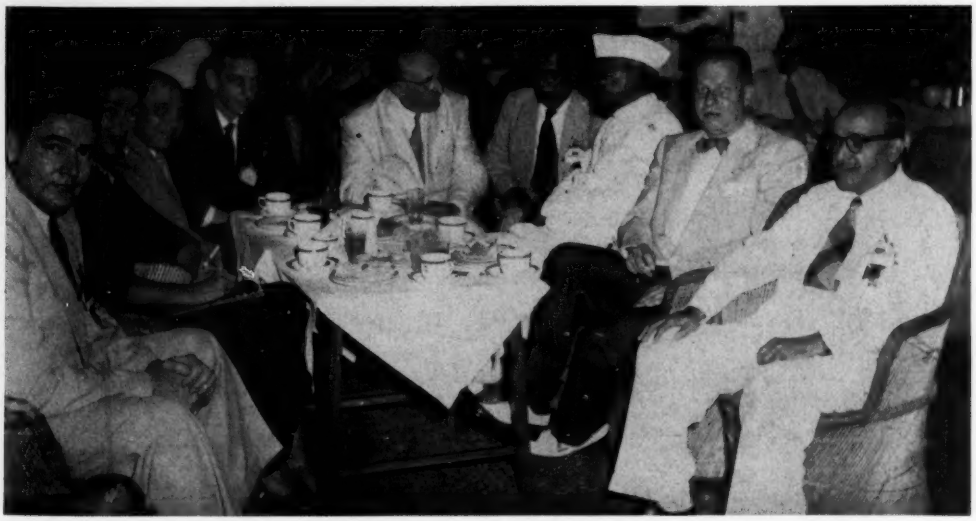
Dr. C. S. Patel, President of Medical Council of India, addressing Biennial Meeting of Indian Section of International College of Surgeons in Bombay.



Dr. V. P. Mehta, F.R.C.S., F.I.C.S., Secretary of Indian Section, gives his report at Biennial Meeting in Bombay, India.



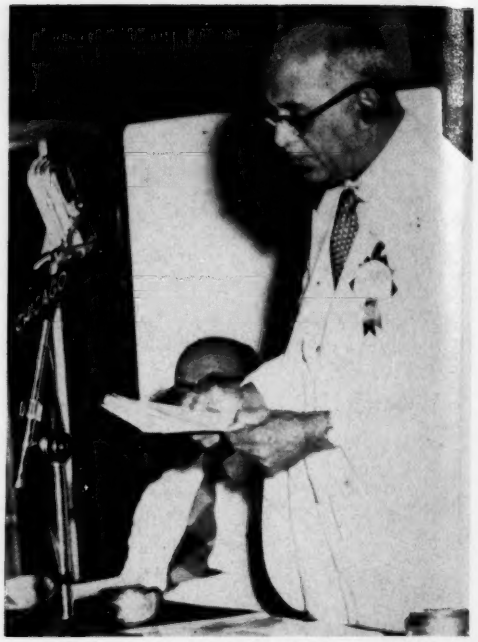
The Hon. Jivary N. Mehta, M.D., M.R.C.S., etc., Finance Minister, Government of Bombay, India, and Dr. Thorek.



At the Garden Party given by Dr. A. V. Baliga, F.I.C.S., in Bombay, India.

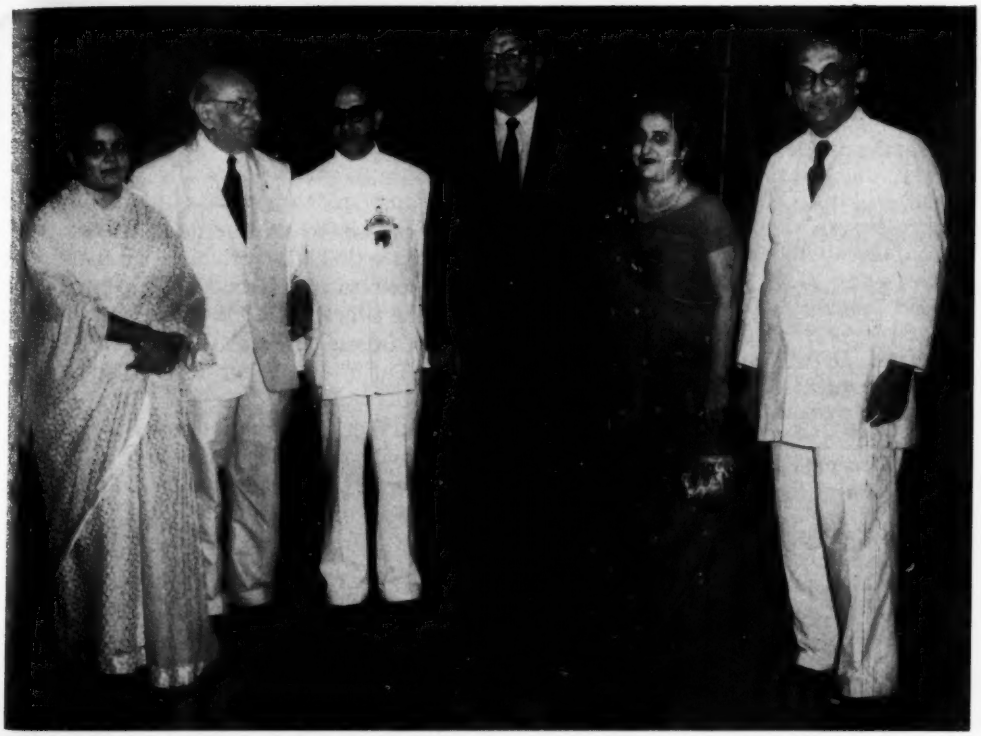
The committee responsible for the arrangements for the biennial meeting outdid themselves in planning entertainment for the guests from the United States. Among other interesting events was a garden party given by **Dr.** and **Mrs. Annappa V. Baliga** at which the **Hon. Jivaray N. Mehta,** Finance Minister of the Government of Bombay was present; a garden party arranged by **Prof. R. N. Cooper** in honor of the American group, and an invitation to the wedding of Dr. Cooper's cousin, where the Parsee ceremony held in the open air with more than 1,000 invited guests present was both impressive and interesting. The wedding was followed by a banquet attended by the American visitors and a large number of government officials.

A full day of sightseeing in Bombay and its vicinity, including the Hanging Gardens, the Marine Drive and Juhu Beach, ended the biennial meeting and concluded the planned program of events



Dr. R. N. Cooper, F.R.C.S., F.I.C.S., addressing meeting in Bombay.

Dr. Thorek addressing meeting of Congress in India.



Group at reception for U. S. Surgeons given by Prof. R. N. Cooper, in Bombay, India.

which were arranged under the leadership of **Dr. Cooper, Dr. V. P. Mehta** and **Col. K. G. Gopenath Pandalai,** F.R.C.S. (Eng.), F.I.C.S. The visiting group of surgeons will never forget the hospitality they received in Bombay and the gracious entertainment offered them by their hosts in India.

PLAN NOW TO ATTEND

the Twentieth Anniversary International Surgical Congress

in Geneva, Switzerland

commemorating the founding of the International

College of Surgeons in 1935

See Announcement on Back Cover

Italian Section

Geriatric Society to Hold Fifth National Congress

Prominent members of the Italian Section of the International College of Surgeons will participate in the Fifth National Congress of the Italian Society of Gerontology and Geriatrics, to be held in Turin, June 27-29 inclusive, 1955.

The Congress will open with a lecture, *The Biologic Basis of Senescence,* by **Prof. P. Bastai,** M.D. The following papers will then be presented: *Senescence of the Cutaneous Apparatus,* by **Prof. G. Favilli,** M.D., and **Prof. G. Manganotti,** M.D.; *The Indications for Surgical Intervention in the Aged,* by **Prof. E. Malan,** M.D., F.I.C.S., and *The Prostate and Senility,* by **Prof. F. de Gironcoli,** M.D., F.I.C.S. An account of a highly pertinent study, *The Organization of Geriatrics in Italian Hospitals,* will be another interesting feature of the program.

Communications are strictly limited to topics related to the main theme of the Congress. Those wishing to participate are requested to send their contributions to the Secretary of the Congress, **Dr. Pier M. Casassa,** Medical Clinic, Corso Polonia 14, Turin, Italy, not later than May 15, 1955.

Further information may be obtained by writing either to the Secretary at the aforementioned address or to the Italian Society of Gerontology and Geriatrics, Viale Morgagni 85, Florence, Italy.

Correction: In the January issue of the *Bulletin,* the titles of **Dr. S. R. Shapiro,** Ph.D., author of "Evaluation of Founder's Collection of Medical Manuscripts Presented to the International Surgeons' Hall of Fame" (p. 1) should have read as follows:

Editor, U. S. Cumulative Book Auction Records; Yale Library Associate; Member of the Bibliographical Society of America; Member of the Society of Libraries of New York University, etc., New York City, New York.

The sincere apologies of the *Bulletin* are extended to **Dr. Shapiro** for the errors in the original version.

Japanese Section

Japanese Section to Hold Second Annual Congress

The Second Annual Congress of the Japanese Section of the International College of Surgeons will be held on October 30, 1955, in Tokyo, Japan.

The officers and members of the Section extend a sincere invitation to all surgeons or members of allied professions to come to the Congress which is being planned to cover a variety of subjects interesting to the general surgeon as well as to the specialist.

Those who desire to attend or who would like further information regarding the Congress please communicate with **Prof. Dr. Komei Nakayama,** Secretary of the Japanese Section of the International College of Surgeons, Chiba University, Chiba, Japan, or the International Secretariat, 1516 Lake Shore Drive, Chicago, Illinois.

Netherlands Section

Netherlands Section Holds Annual Meeting

The annual meeting of the Netherlands Section was held in Hilversum at the Sanatorium and Hospital voor Thoracic Surgery on November 20th, an official business meeting opening the session at 3 p.m.

A number of matters were discussed regarding future actions of the Section at this meeting, among which the following items were outstanding in interest and in long-view planning:

1. A study of the possibilities for ways and means of implementing a plan to give material aid to young surgeons doing medical research and other types of scientific work.

2. Plans for stimulating an interest in research and writing by offering a bi-annual cash award to the author of the best surgical article written in the Netherlands.

3. A decision to pay the expenses of two junior members or assistants to the Fellows of the Netherlands Section of the International College of Surgeons so they might attend the Congresses of the College and thus have the opportunity of studying with the leading surgeons of the world. It was hoped that this action would also encourage young men to become college minded and to do more graduate study.

The business meeting was followed by a scientific meeting at which papers on the work of the Sanatorium and the results being obtained were read. An open discussion on this material followed the presentation of the papers.

Present at the session were two members of the German Section, **Prof. K. Boshamer,** M.D., F.I.C.S., of Wuppertal-Barmen, and **Prof. Carl J. Anselmino,** M.D., F.I.C.S., of Wuppertal-Elderfeld. **Prof. Boshamer,** secretary of the German Section of the College, spoke briefly, giving a short resumé of the activities of the German organization. Plans for a joint meeting of the two Sections in Münich during 1955 were made.

The meeting closed with a dinner at the beautiful "hoge Vuursche" Castle near Hilversum and a dance at Laren.

Woman's Auxiliary

From time to time members have reason to use the names and addresses of officers of the National Board of the Woman's Auxiliary of the United States and Canadian Sections of the International College of Surgeons for 1954-1956. A list of these officers and their home addresses follows:

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Mrs. Casey E. Patterson
5205 Brookview Drive, Dallas, Texas
Mrs. E. Karley Pinkerton
1470 W. King Edward Avenue, Vancouver, British Columbia, Canada
Mrs. Curtice Rosser
The Stoneleigh, Dallas, Texas
Mrs. Chester W. Trowbridge
Box 177, Wayne, Illinois
Mrs. Charles J. Weigel
1240 Monroe, River Forest, Illinois

Please keep this list handy so you will know where to write whenever you wish to let the Chapter know something of your activities in connection with the College or you have a question to ask concerning organizational activities. The officers will be pleased to hear from you. They are your representatives and are always glad to know you better.

Mrs. Walter Cleveland Burket
President

General News Notes

Baylor University to Have Nuclear Cancer Unit

Baylor University Hospital in Dallas, Texas, is the recipient of a gift of $75,000.00 for the purchase of a "Theratron" cobalt 60-beam cancer therapy unit. The gift was made on Jan. 9, 1955, by the Reserve Life Insurance Company of Dallas, in honor of the company's president, **C. A. Sammons.** The installation of this advance machine will place Baylor among the leading centers for treatment of cancer in the United States.

The unit, which weighs 8 tons, will require a special building with heavy lead and concrete insulation on ceiling, walls and floor to keep radioactivity under positive control. Construction will begin within thirty days.

The new cancer therapy unit and the first supply of atomic radioactive material is scheduled for delivery to Baylor in June 1955.

The building and facilities, which will be valued at $150,000.00, will be known as the Charles A. Sammons Irradiation Therapy Center.

American Goiter Association Announces Meeting

Dr. John C. McClintock, F.A.C.S., Secretary of the American Goiter Association, announces that the 1955 meeting of this organization will be held in the Skivrin Hotel, Oklahoma City, on April 28, 29 and 30. The program for the three-day meeting will consist of papers and discussions dealing with the physiology and diseases of the thyroid gland.

Essay Contest for Scholarships Announced

The Foundation of the American Society of Plastic and Reconstructive Surgery, Inc., announces the rules and awards offered in its essay contest, closing July 1, 1955. The contest is open to residents of the American continent, British Dominions, and Western Europe.

Entrants have been divided into two groups. The first (Junior) classification is restricted to residents in training and to plastic surgeons who have been in practice not longer than five years. The second (Senior) classification is open to surgeons in the active practice of plastic and reconstructive surgery for more than five years.

Prizes offered in the Junior Classification are: first, $1000 in cash and a three months' scholarship; second, $750 in cash and a three months' scholarship, and third, certificates of honorable mention with or without a limited fellowship. In the Senior Classification the award will be a silver plaque or certificates of honorable mention.

For additional information and rules concerning subject matter and method of application, write the **Award Committee, c/o The Foundation of the American Society of Plastic and Reconstructive Surgery, Inc., 30 Central Park South, New York 19, N. Y.**

Annual Otolaryngologic Assembly Announced

The Department of Otolaryngology of the University of Illinois College of Medicine, Chicago, announces its Annual Assembly in Otolaryngology, to be held from Sept. 19 through Oct. 1, 1955. The program will consist of two main parts:

Part I (*September 19 through September 24*): Surgical anatomic aspects of the head and neck; fundamental principles of surgical treatment of the neck, and histopathologic aspects of the ear, nose and throat. This portion of the program will be under the personal direction of **Dr. Maurice F. Snitman,** F.A.C.S.

Part II (*September 26 through October 1*): Lectures and panel discussions of advancements in otolaryngology. The chairman of this section will be **Dr. Emanuel M. Skolnik.**

Registration for one or both weeks is optional.

American Students in Mexico Offer Guest Services

Physicians and surgeons who wish to visit Mexico are cordially invited to communicate with the Association of American Medical Students of the National University of Mexico, Admon, de Correos 45, Mexico I, D.F., Apartado 13759. The members of this organization have completed plans for a program of service to visiting doctors and will be delighted to provide escorts and guides to the various medical institutions of the city.

SPECIAL COURSE IN UROLOGY

Professor Dr. Raymond Darget, President of the Section on Urology of the International College of Surgeons, has begun a series of international réunions of urologists in Bordeaux, France, that will continue during the winter half-year. The first meeting, attended by **Drs. Bernard Fey,** F.I.C.S., of Paris, France, and **Alfonso de la Peña,** F.I.C.S., of Madrid, Spain, was very successful.

Professor Darget will also present a special course in Urology at the Hôpital du Tondu, Bordeaux, France, from June 6th to June 10th, following the European Congress of the Collège International des Chirurgiens in Geneva, Switzerland. This course will be conducted in two sections. Section 1 will cover the treatment of malignant tumors of the bladder including radium therapy and considering palliative treatments such as denervation of the bladder and uretero intestinal anastomosis. Section 2 will be centered around the treatment of malignant tumors of the prostate, discussing radium therapy and perineal and ischio rectal implantation of radium needles.

The course will include operations, cadaver work, lectures and the presentation of patients suffering from the aforementioned malignant neoplasms.

The number of participants admitted to the course is strictly limited, so all doctors interested are urged to write for additional information to the Collège International des Chirurgiens, 17, Rue Castéja, Bordeaux, France, as soon as possible.

Regents and Vice Regents of the United States Section of the International College of Surgeons, 1954-1956, by States

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Diplomate, American Board of Surgery

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Diplomate, American Board of Surgery

Jesse Ullman Reaves, M.D., F.I.C.S.
103 Dauphin Street, Mobile 12
Diplomate, American Board of Urology

Paul Wolfe Shannon, M.D., F.I.C.S.
820 Woodward Building, Birmingham 3
Diplomate, American Board of Orthopedic Surgery

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Diplomate, American Board of Surgery

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Diplomate, American Board of Ophthalmology

Carl Louis Wilson, M.D., F.A.C.S., F.I.C.S.
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Diplomate, American Board of Proctology

VICE-REGENTS:

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3400 Webster Street, Oakland 9
Diplomate, American Board of Orthopedic Surgery

Gerald Brown O'Connor, M.D., F.A.C.S., F.I.C.S.
490 Post Street, San Francisco
Diplomate, American Board of Plastic Surgery

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VICE-REGENTS:

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School of Medicine, Los Angeles 24
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1137 South Westlake Avenue, Los Angeles 6

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Franklyn Davis Hankins, M.D., F.I.C.S.
4207 Ridgeway Street, San Diego 16
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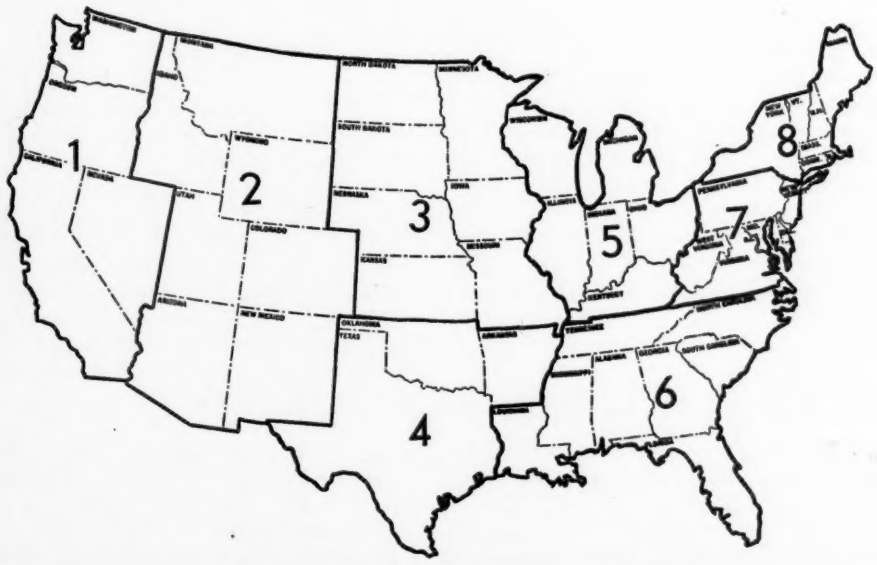

Map outlining regional divisions of the United States Section of the International College of Surgeons: 1. Pacific Division; 2. Rocky Mountain Division; 3. North-Central Division; 4. Southwestern Division; 5. Great Lakes Division; 6. Southeastern Division; 7. Mid-Atlantic Division, and 8, Eastern Division.

In Memoriam

WARREN CHARLES MERCER
M.D., F.A.C.S., F.I.C.S.

At the age of 83, after two years of illness, Dr. Warren Charles Mercer, who practiced for fifty-three years in Philadelphia, Pennsylvania, died on Dec. 17, 1954.

Born in Embreeville, Chester county, Dr. Mercer attended Martin Academy, Kennett Square, and West Chester Normal School before graduating from Hahnemann Medical College in 1899. He interned at the old St. Luke's Hospital and later served on the staffs of Hahnemann Hospital, Community Hospital, Broad Street Hospital, St. Luke's and Children's Medical Center and West Jersey Hospital, Camden. He was Professor of Clinical Obstetrics at Hahnemann for many years and in 1939, in recognition of his services, was awarded the honorary degree of Master of Arts in medicine by his alma mater. He became professor emeritus in 1942. He was also consulting obstetrician at West Chester Homeopathic Hospital and Crozer Hospital, Chester.

Dr. Mercer was a member of the Pennsylvania State Homeopathic Society; the American Institute of Homeopathy; the Germantown Homeopathic Society; the Philadelphia Medical Club; the Physicians Motor Club; a charter member of the Clinical Research Society of Philadelphia, and a Fellow of the American College of Surgeons and the International College of Surgeons.

FREMONT A. CHANDLER
M.D., F.A.C.S., F.I.C.S. (Hon.)

We regret to announce the death of Dr. Fremont A. Chandler, 61, orthopedic surgeon, on Dec. 24, 1954.

Dr. Chandler was born in Chicago, Illinois, on Nov. 29, 1893. After graduating from Columbia University in 1919, he interned at Sloane Hospital for Women, Hartford Hospital and Grenfell Hospital, served as Chairman of the orthopedic surgery department of the University of Illinois medical school and was senior attending orthopedic surgeon at St. Luke's Hospital.

Dr. Chandler was a member of the American Academy of Orthopedic Surgeons; the American Board of Orthopedic Surgery; the American Institute of Traumatic Surgery; the American Medical Association; the American Orthopedic Association; the American Association for the Study and Control of Rheumatic Diseases; the American Academy of Cerebral Palsy; the Chicago Medical Society; the Chicago Orthopedic Society; the Illinois State Medical Society, and several other organizations. He was a Fellow of the American College of Surgeons and an Honorary Fellow of the International College of Surgeons. He was also associate editor of Lewis-Walters *Practice of Surgery* and the *Journal of Bone and Joint Surgery.*

JEROME WAGNER
M.D., F.I.C.S.

Dr. Jerome Wagner, proctologist of New York City and Lyme, Connecticut, 68, died on Feb. 3, 1955.

Born in East Portchester, Connecticut, on Jan. 28, 1887, Dr. Wagner attended De Witt High School, won a Pulitzer scholarship to Cornell Medical College and obtained his degree in 1907. He interned at Lebanon and East Side Maternity Hospitals and was clinical professor of proctology at the New York Polyclinic Medical School and Hospital.

Dr. Wagner was a member of the American Medical Association; the New York County and State Medical Societies; the New York Academy of Medicine, and the Associate American Proctologic Society. He was a Fellow of the New York Proctologic Society, the National Gastro-Enterologic Society and the International College of Surgeons.

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FOUNDED BY DR. MAX THOREK

Section II

Bulletin of Meetings—Announcements

National and International Activities

Vol. XXIII *March, 1955* No. 3

INTERNATIONAL COLLEGE OF SURGEONS

SCHEDULE OF MEETINGS

INTERNATIONAL—NATIONAL—REGIONAL

INTERNATIONAL

1955

March 26-27	National Reunion of French Section	Niort, France
May 23-26	Twentieth Anniversary Meeting	Geneva, Switzerland
Oct. 12-16	Third Congress, Brazilian Section	Belo Horizonte, Brazil
Oct. 22-23	Meeting of Austrian Section	Vienna, Austria
Oct. 30	Second Congress, Japanese Section	Tokyo, Japan

NATIONAL: UNITED STATES AND CANADIAN SECTIONS

Sept. 12-15	Convention Hall	Philadelphia, Pennsylvania

REGIONAL

March 25	Statler Hotel	New York City, New York
July 1-4	Chatham Bars Inn	Cape Cod, Massachusetts

1956 INTERNATIONAL

Nov. 19-24	Tenth Biennial International Congress	Buenos Aires, Argentina

At the Invitation and Under the Sponsorship of the Argentine Government

NATIONAL: UNITED STATES AND CANADIAN SECTIONS

Sept. 9-13	Palmer House	Chicago, Illinois

1957 NATIONAL: UNITED STATES AND CANADIAN SECTIONS

Sept. 8-12	Palmer House	Chicago, Illinois

1958 NATIONAL: UNITED STATES AND CANADIAN SECTIONS

Sept. 7-11		Atlantic City, New Jersey

The Journal of the International College of Surgeons

FOUNDED IN GENEVA, SWITZERLAND, 1935 - INCORPORATED IN WASHINGTON, D. C., 1940

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Section II

Bulletin of Meetings — Announcements
National and International Activities

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Section II

Bulletin of Meetings—Announcements

National and International Activities

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Wilbert Ashton Liebeler, M.D., F.A.C.S., F.I.C.S., Grand Forks, North Dakota

President's Page

Joining an organization has become as much the American way of life as owning an automobile or a radio. People differ in their reasons for joining. Some join a club to keep up with the Joneses; others belong to a luncheon club to improve business connections or to provide themselves with entertainment and companionship.

Doctors join their county medical societies because these are component parts of the state and national organizations, as well as official representatives in most matters pertaining to medicine.

Surgeons apply for membership in surgical societies for various reasons. Primarily, it is a mark of recognition to be elected to such organizations. Such membership does not especially impress one's patients, but it does carry weight with one's colleagues. Membership in one of the large colleges improves the surgeon's opportunities of being elected to some of the more exclusive, smaller, regional or specialty groups, or of being appointed to the surgical staff of a hospital.

From that point on men's reactions differ. Some are content to put their framed certificates on the walls of their offices and to attend a meeting now and then. Others use the opportunity to attend meetings regularly and to improve their knowledge by absorbing as much as possible from the scientific programs and from contact with their fellow members. Others go still further and take part in the programs or in the direction of the organization. Many of the latter are stimulated by the desire to build the group, to see it run efficiently, and to procure the best possible programs.

Behind any successful organization there must be not just a few officials but many members who have the best interests of the undertaking at heart. No really successful group attains its position through the work of its officers alone. If they have the ability to inspire the general membership and if the latter has the will to respond, success is bound to result.

Dr. Arnold S. Jackson, F.A.C.S., F.I.C.S.

One of the first things that attracted me to the International College was the genuine love and devotion of its members for the organization. First I was impressed by the spirit of sacrifice of the officers, men like the late lamented Drs. Herbert Acuff and Custis Lee Hall, who devoted many of the best years of their lives to the building and advancement of the College. These surgeons, with all the other officers over the years, paid all their expenses to the Council meetings held four times a year in Chicago. The Founder, Dr. Max Thorek, as everyone knows, has devoted his life to the College, and has accomplished more than it would seemingly be possible for any one individual to do. He has truly encircled the globe with the ideals and purposes of the College and caused it to become a world wide organization. But he constantly reiterates that

this tremendous task was not accomplished without the help of many others both here and abroad. It was Dr. William Carpenter McCarty, my former teacher of pathology at the Mayo Clinic, who first inspired my interest in the College at the Denver meeting, where he received the recognition of honorary Fellowship, and I was fortunate enough to appear on the program. What he said to me then is still well remembered, "Yes, I am happy to join the International College of Surgeons, because I believe it is destined to become a great and perhaps the greatest organization of its kind for the betterment of mankind. It will raise the standards of surgery not only here but everywhere. When the war is over it will become the great instrument for world peace."

This last sentence was almost identical with a comment of Pope Pius XII, made when Drs. Acuff, Thorek, Graña, Meyerding, and I had an audience with him in 1951. As our College expands from nation to nation and continent to continent, these prophecies become more and more realistic.

One need only mention the name of Meyerding to point out another great, loyal, devoted, and unselfish member of the College. Many, on retirement, seek the seclusions of some faraway spot with a boat and a fishing rod, but not Henry Meyerding. As past president of the International Orthopedic Society, formerly world-renowned orthopedist at the Mayo Clinic, and the holder of many other titles, including the Presidency of the United States Section of the College, Dr. Meyerding, since his retirement, has traveled the world over in the interest of our organization.

What has been said of these few could be said of many others. Drs. Moses Behrend, Wayne Babcock, Harry Bacon and many others have set a similar example. And there are hundreds more who, although they may not have achieved national recognition as leaders in surgery, constitute one of the strongest bulwarks of American democracy, modern surgical practice and the International College of Surgeons—intelligent, competent surgeons who carry the bulk of the load. It has been said that seventy per cent of the operations performed in our country are performed not in the metropolitan centers but in the highways and byways, so to speak; in our smaller cities and communities, by local men whose lives are devoted to the service of their fellowmen. These are the men we need to build up and strengthen our College, and these are the men to whom I address this message with particular emphasis. I meet them here, there and everywhere in traveling about the forty-eight states of the Union and am endlessly impressed by the scope of their achievements, their devotion to their profession, their great human warmth of personality and their capacity for friendship. I only wish I could single out one after another and recount each one's excellencies in detail, but this is obviously impossible.

Before succeeding to my present office, I devoted my efforts to improving our scientific programs, helping to raise our standards and increasing our membership. A year from September I shall have completed my term as President, and it would be very gratifying if hundreds of such men all over the country would devote some of their time and interest to the strengthening of our College during this period. If every one of our five thousand members would bring into the College just one outstanding man, the United States Section alone would have over ten thousand members by the end of the term. We are not just interested in numbers, but we are interested in fine ethical surgeons who have excellent qualifications. The younger ones should preferably have their Specialty Board credentials. If they lack these, it is best that they are Fellows of the American College of Surgeons, that they have contributed to the medical literature something of scientific value, that they are teachers, and that they are capable of performing major operations. Without at least some of these requisites they are not eligible for Qualified Fellowship.

although they may be given an opportunity to take the examinations.

Older surgeons, not Board-certified, who have attained such reputation that they are held in high esteem by their colleagues and perhaps are chiefs of hospitals or surgical staffs, may be eligible for Qualified Fellowship. It would be erroneous to assume that because a surgeon is not Board-certified he is not a capable surgeon. In fact, if most of us were to select a surgeon to operate upon us, we might choose an experienced, middle-aged man lacking his "Boards" in preference to a young, inexperienced Board surgeon.

Surgeons who lack the requirements for Qualified Fellowships may still be good surgeons and eligible for Associate Memberships. Surgical residents can be granted Junior Memberships, which entitle them to attend all meetings of the College and provide a stepping stone to advancements. It is in this group that your efforts are especially desired; from the young surgeons of today must come the leaders of tomorrow.

Even though you have been an active member of the College, there is still much to do for the organization. Efforts to injure us have been made and are constantly being made by a few misguided persons, but we can afford to ignore them. Such efforts are like the washing of the waves against a fortified coastline. No world organization of ten thousand members can be harmed by such attempts. It is for you to prove this, and to put your effort behind your College today.

SPECIAL COURSE IN UROLOGY

Professor Dr. Raymond Darget, President of the Section on Urology of the International College of Surgeons, has begun a series of international réunions of urologists in Bordeaux, France, that will continue during the winter half-year. The first meeting, attended by **Drs. Bernard Fey,** F.I.C.S., of Paris, France, and **Alfonso de la Peña,** F.I.C.S., of Madrid, Spain, was very successful.

Professor Darget will also present a special course in Urology at the Hôpital du Tondu, Bordeaux, France, from June 6th to June 10th, following the European Congress of the Collège International des Chirurgiens in Geneva, Switzerland. This course will be conducted in two sections. Section 1 will cover the treatment of malignant tumors of the bladder including radium therapy and considering palliative treatments such as denervation of the bladder and uretero intestinal anastomosis. Section 2 will be centered around the treatment of malignant tumors of the prostate, discussing radium therapy and perineal and ischio rectal implantation of radium needles.

The course will include operations, cadaver work, lectures and the presentation of patients suffering from the aforementioned malignant neoplasms.

The number of participants admitted to the course is strictly limited, so all doctors interested are urged to write for additional information to the Collège International des Chirurgiens, 17, Rue Castéja, Bordeaux, France, as soon as possible.

DR. ROSS T. McINTIRE
Vice Admiral U. S. N. (Ret.), F.A.C.S. (Hon.), F.I.C.S. (Hon.)
Executive Director, International College of Surgeons

Dr. Ross McIntire Appointed Executive Director of the International College of Surgeons

Vice Admiral Ross T. McIntire, U. S. Navy (Ret.), has been appointed Executive Director of the International College of Surgeons, according to an announcement made by **Dr. Max Thorek,** Founder and International Secretary General of the College, at a meeting on Feb. 19, 1955. The announcement was made on behalf of the Board of Trustees of the College and the Board of Regents of the United States Section. Admiral McIntire will make his headquarters at the home of the College, 1516 N. Lake Shore Drive, Chicago 10, Illinois.

Admiral McIntire was physician to the White House and personal physician to President Roosevelt from 1933 to 1945. He was appointed Surgeon General of the Navy and Chief of the Bureau of Medicine and Surgery with the rank of Rear Admiral on Dec. 1, 1938, and was reappointed for a second four-year term on Dec. 1, 1942. In 1944 he was promoted to the rank of Vice Admiral. He was awarded the Distinguished Service Medal for his outstanding services during World War II. In April 1947 he was transferred to the Retired List of the Navy. Subsequently he was appointed director of the American Red Cross National Blood Program and is still a member of the Advisory Board, Health Services, of the Red Cross.

A specialist in ophthalmology and otolaryngology, Admiral McIntire is an Honorary Fellow of the International College of Surgeons, the American Surgical Association, and the American Association for Traumatic Surgery; a Fellow and member of the Board of Governors of the American College of Surgeons; holder of an honorary certificate from the American Board of Otolaryngology; a Fellow of the American College of Physicians, and a member of the American Medical Association and other medical societies. His medical degree was received in 1912 from Willamette University Medical School, now the University of Oregon.

In April 1917, two days before the declaration of war with Germany, Dr. McIntire was commissioned a Lieutenant (j.g.) in the Medical Corps of the Navy and attached to the surgical staff as an assistant surgeon. He took a postgraduate course in naval medicine at the Naval Medical School in Washington and served for three years on the U.S.S. *New Orleans* on the Asiatic Station. For a short time in 1920 he was stationed at the U.S. Naval Hospital, Canacao, P.I. After doing postgraduate study at Washington University in St. Louis, Missouri, in 1921, he began two years' service as head of the Eye, Ear, Nose and Throat Department of the Naval Hospital in San Diego. He served as head of the same department on the hospital ship U.S.S. *Relief* twice prior to 1931, and also did further postgraduate work. In 1931 he was appointed instructor in ophthalmology and otolaryngology at the Naval Medical School in Washington and in March 1933 he was assigned to temporary additional duty as physician to the White House. In February 1935 he was officially appointed to that post, continuing to serve at the Naval Hospital and Medical School. He accompanied the President on his numerous inspection trips with the fleet at sea or to overseas bases, and also on official journeys ashore.

Six universities — George Washington, Tulane, Marquette, Syracuse, Willamette and Georgetown—have conferred honorary degrees upon him. He has been decorated by the governments of Brazil, Sweden, Belgium, France, Poland, Luxemburg, Denmark, Nicaragua, Norway, French Morocco and Great Britain.

Admiral McIntire, always active in support of worthy causes, has been a preeminent leader in rehabilitation movements. In 1947 he was appointed to head

the President's Committee on National "Employ the Physically Handicapped" Week, which was established by President Truman and the late Secretary of Labor Schwellenbach; in 1949 this was enlarged to a year-round program of information and education to provide greater opportunities for those handicapped by disease, accident or congenital defects. Establishment of the Office of Rehabilitation in the Medical Department of the Navy was achieved while Admiral McIntire was Surgeon General. His interest in progress in hospital service is demonstrated by membership on the boards of trustees of Group Hospitalization, Inc., Columbia Hospital for Women, St. Elizabeth's Hospital, Georgia Warm Springs Foundation and the New York Infirmary for Women and Children. He is an honorary member of the American Hospital Association, a member of the Federal Board of Hospitalization, Veterans Administration, and a consultant of the Federal Works Agency Planning Hospital Facilities in the District of Columbia.

His extraordinary ability as an organizer was evident during the war emergency period, when, under his direction, the great and rapid increase in naval medical personnel and in medical and hospital facilities was accomplished in both the Atlantic and Pacific theaters. Research in various branches of naval medicine to keep abreast of the rapidly changing methods brought about by the war was also closely studied and developed during his administration.

The appointment of Admiral McIntire as Executive Director of the International College of Surgeons and the United States Section is a highlight in the history of the organization. He has expressed his firm confidence in the glorious destiny of the College, founded as it is upon ideals of world-wide brotherhood for surgeons based upon coordinated efforts to improve surgical teaching, training and research and to advance the practice of the art and science of surgery. His wide acquaintance with leaders in medicine and related welfare work, his record as a sponsor and spokesman for projects related to health, his reputation for sound judgment and clear thinking and his ability to win the cooperation of his associates and the public will be an impetus to the already rapid advance of the College program throughout the world.

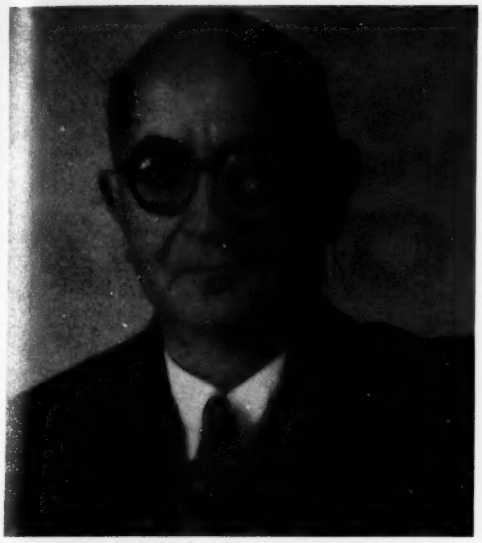
BRONCHOESOPHAGOLOGY COURSE OFFERED

The next bronchoesophagology course to be given by the University of Illinois College of Medicine is scheduled for the period Oct. 24 to Nov. 5, 1955. The course is under the direction of **Dr. Paul H. Holinger, F.A.C.S.**

Interested registrants will please write directly to the Department of Otolaryngology, University of Illinois College of Medicine, 1853 West Polk Street, Chicago 12, Illinois.

Pen Portraits of Distinguished Fellows

ORD. PROF. FAHRI AREL, M.D., F.I.C.S.



Ord. Prof. Fahri Arel, M.D., F.I.C.S.

Born in Istanbul, Turkey, in 1894, Ord. Prof. Fahri Arel, M.D., F.I.C.S., went to France for his college work and then to Geneva, Switzerland, where he studied medicine and received his degree of Doctor of Medicine. From 1918 to 1922 he served as assistant to the surgical clinic of the Faculty of Medicine of Geneva. After doing postgraduate work in clinics in Paris and Berlin, he returned to Turkey in 1924 and was appointed associate surgeon at Haseki Hospital.

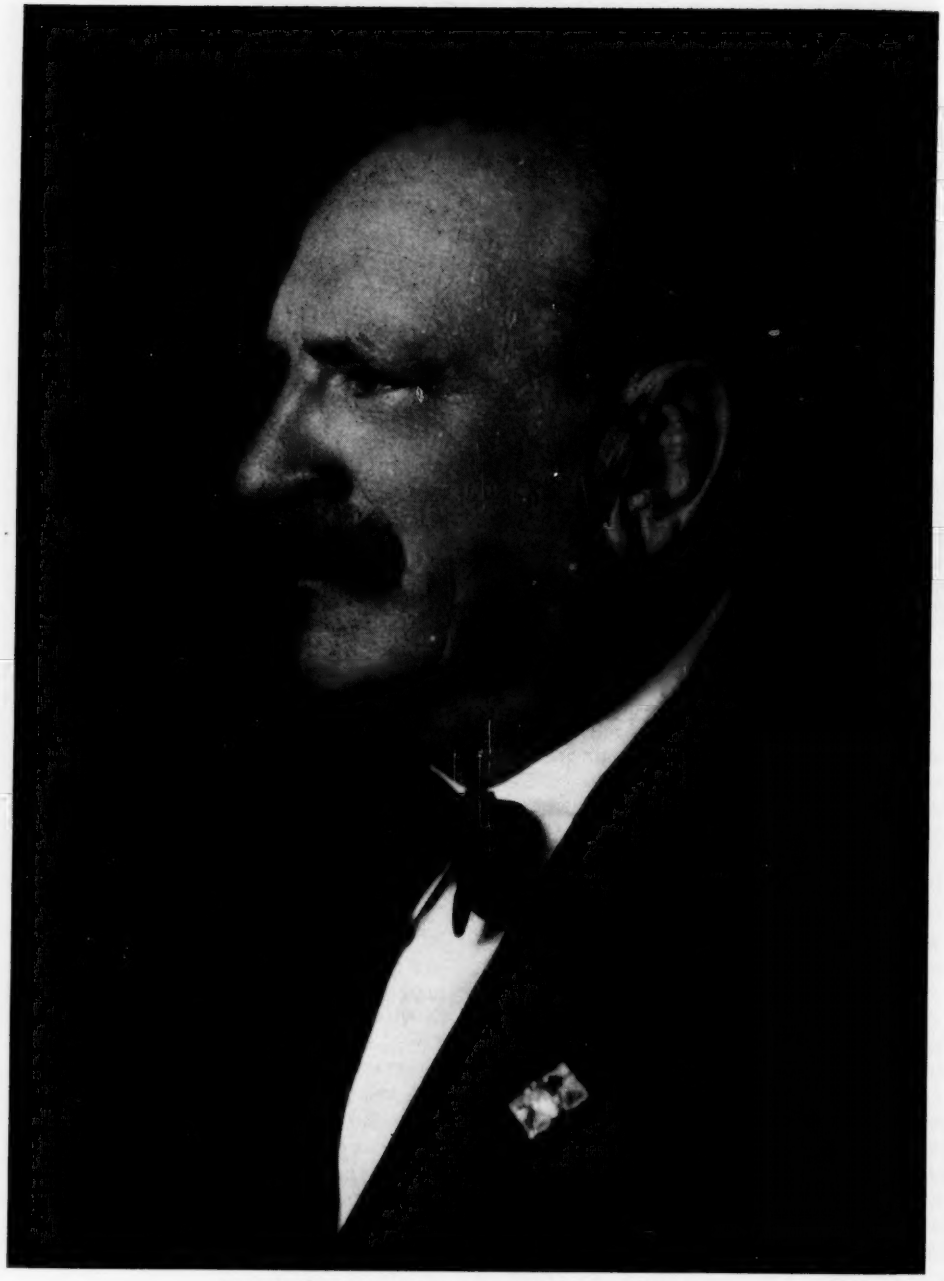
In 1933 Dr. Arel served as assistant professor to Ord. Prof. Dr. Rudolf Nissen, M.D., F.I.C.S., who had been invited to act as director of the I. Surgical Clinic in Turkey. In 1940 Dr. Arel received the title of professor of surgery, and in 1951 he was appointed director of the III. Surgical Clinic with the title of Ord. Prof. of the Faculty of Medicine of the University of Istanbul. He established the thoracic surgery department at the university and has been instrumental in the training of a number of thoracic surgeons in Turkey.

In 1936 Dr. Arel prepared a brochure on bronchiectasis, and the same year he and Dr. Nissen published their definitive work, *General Surgery*. In 1950 he became the first doctor in Turkey to publish a comprehensive study of thoracic surgery. He has written more than ninety papers and has become an outstanding contributor to surgical literature.

In 1939 Dr. Fahri Arel was elected a member of the International College of Surgeons and attended the Congress when it met that year in New York City. He presented a case in which tibial defects were filled with fibular transplants. He remained in the United States for nine months, visiting and speaking before many clinics on thoracic surgery.

As Dean of the Faculty of Medicine at the University of Istanbul from 1943 to 1946, and as the Senator of the University from 1946 to 1949, Dr. Arel has served as president or as a member at various medical and surgical association meetings and lecture series. In addition to being a Fellow of the International College of Surgeons, he is a member of the Academie de Chirurgie (Paris) and the Association des Chirurgiens Français.

Dr. Arel is a man of varied and intense interests, carrying every task he undertakes to a satisfactory conclusion with the characteristic ease and simplicity that mark his whole personality. When the group of Fellows from the United States Section of the College made their world tour last November, Dr. Arel and the other members of the Turkish Section arranged a series of brilliant scientific sessions for the delegation. Plans made for the comfort and entertainment of visiting members were superb in both scientific and social matters. The perfection was indicative of the character and ability Dr. Arel brings to all his undertakings. The cooperation and fellowship of such men promise much for the fulfillment of the ideals and principles of the College.



Dr. André Crotti, LL.D., F.A.C.S., F.I.C.S.

Dr. André Crotti Retires—?

Surrounded by mementos of his personal and professional life—pictures of his children and grandchildren, piles of medical journals, framed scenes from his European youth, surgical books he has written, a small reproduction of *A Physician's Prayer,* an Emeritus President's charter from the International College of Surgeons—**Dr. André J. Crotti, F.A.C.S., F.I.C.S.,** retired, sat as his desk on Saturday, January 23, and looking at a blank appointment page, reminisced about his career.

For over half a century of activity in what he considers "one of the greatest callings one can have," **Dr. Crotti** has been studying and practicing in the field of surgery. Born in Buenos Aires, Argentina, on August 14, 1873, **Dr. Crotti** went to the University of Lausanne in Switzerland, where he got his degree in medicine at the turn of the century. Feeling as young as the new era, he went back for more training in hospitals in Italy, Germany and France, ending with five years of work in surgery under the two giants of that day, **Kocher** of Bern and **Roux** of Lausanne.

Feeling better equipped for private practice, he came to the United States to marry the girl he had met in Switzerland, **Marie Louise Gwynne,** and settle down to practice in her home town, Columbus, Ohio. Although he had completed his medical education in Europe, he matriculated at old Starling-Ohio Medical School in Columbus in 1908 and graduated the same year. He almost lost his first patient, a young man with goiter, because his heavy European accent could hardly be understood. In three years he had treated only 11 patients. His wife, worried over his dejection, suggested a return to Switzerland, but **Dr. Crotti** knew that a moral defeat at that time would mark him forever. He turned to other things, busying himself with teaching and experimentation, through which his natural ability was soon recognized. During the first World War, his service as head of surgery at Walter Reed Hospital won him international distinction.

On leaving the service he returned to Columbus to take up the practice which was to prove of inestimable benefit to mankind. In his specialization, thyroid surgery, he was a trail blazer, and his courage, persistence and insight have made highly significant contributions to the safety of thyroid surgery.

He was, however, more than a thyroid specialist. The day before he retired he performed a cancer operation. He remembers one cancer patient whose fluctuations from better to worse and back again for a period of some weeks made him think for a while that he had found a cure for carcinoma. New patients and their needs precluded further research, but **Dr. Crotti** has never forgotten his early hope. "My work is there and perhaps when I am gone someone will take it up again and find success," he says. His assistance in founding the Columbus Free Cancer Clinic and his service there as the first medical director proves his interest in conquering this foe of mankind. He recently participated in the ceremonies which made the Clinic an affiliate of the cancer research laboratories at Ohio State University.

During his half century in Columbus **Dr. Crotti** has served as Chief of Staff at White Cross Hospital, general staff chairman at Grant Hospital and staff member at Children's, Mt. Carmel and St. Francis Hospitals. He taught at the old Starling Medical College and at Ohio State University.

He has devoted much of his time and energy to the International College of Surgeons since its earliest days and has been an outstanding factor in its success. He was the first President of the United States Section and the second President of the International College. He is now President Emeritus. He has carved himself a permanent niche not only on the

pillars of the College but also in the hearts of his Fellow Members, for no better friend ever lived.

Like old soldiers, old surgeons never die. Neither do they fade away. Until the last day of their lives surgeons of the calibre of **Dr. André J. Crotti** contribute by thought, word, counsel and action to the intellectual growth of the profession and the dissemination of surgical knowledge and discipline. The College, and the world, will continue, we hope, to benefit from **Dr. Crotti's** counsel, erudition and keen analytical mind for many years to come. In a universal sense, it can be said that as long as one surgeon lives, so long shall **Dr. Crotti** and his works remain.

Announcing

The Tenth Biennial International Congress

of the

International College of Surgeons

in Buenos Aires, Argentina

at the invitation and under the sponsorship of the Government of Argentina

November 19-24, 1956

For detailed information see the April issue of the *Bulletin*.

United States and Canadian Sections

Report on Washington Meeting

The Mid-Atlantic Division Regional Meeting was held in Washington, D. C., at the Statler Hotel on Feb. 11 and 12, 1955.

Preston A. McLendon, M.D., F.A.A.P., President of the Medical Society of the District of Columbia, gave the welcoming address on Friday morning. He began by stating that as an interne he had aspired to become a surgeon, but the attitude of his father had changed that inclination. He remembered that upon returning home for a convalescent period after an appendectomy during his internship, he was greeted with the remark, "Huh, I never hoped to raise six boys without some trouble, but I never thought one of them would disgrace me by having appendicitis!" His father, who "graduated" after studying medicine for two years of six months each and then "reading" medicine with a practicing physician, "found acute indigestion good enough for him."

Dr. McLendon went on, however, to pay tribute to the surgical profession. "Just as medicine in general has changed and made strides almost inconceivable in its scope, surgery has kept apace, and in many instances forged ahead. You have become diagnosticians and no longer disdain the use of a stethoscope or other aid in your search for the correct answer. You have embraced and initiated biochemical implementation. You have stimulated your mechanical colleagues to develop instruments with which to carry out delicate technical procedures. You have approached the newer developments in corrective surgery as opposed to those of acute purulent diseases such as empyema, osteomyelitis, and so forth.

"The surgeon has played an important role in work among non-civilized peoples. He has carried the message of medicine to all countries of the globe and is truly an ambassador of good-will. Your organization is a pioneer in this movement to bring peoples together in the common cause of world friendship."

Dr. McLendon ended his address with a salute to the entire medical profession which emphasized the principal factors upon which the College bases its current plans and its hope for the future. He said, "We in medicine can be justly proud of the fact that we patent no technics, nor organize cartels to control discoveries which can be of benefit to the health of mankind. . . . Neither commerce nor political ambassadors can point to greater accomplishments. National boundaries do not exist under these circumstances. . . . Medicine speaks a universal language and we, as its spokesmen, have created a role which we can not ignore. Governments would do well to recognize this quality and ability."

Dr. W. Ross Morris, F.A.C.S., President of the Washington Academy of Surgery, followed Dr. McLendon in welcoming the members of the International College of Surgeons to the Washington meeting. After describing the Academy, its membership, and its aims and principles to the surgeons present, Dr. Morris continued, "I am mindful of the fact that the International College of Surgeons is today one of the largest and most influential surgical organizations in the world. Since its inception in 1935 it has had a very rapid and at the same time healthy and successful growth until it now has chapters in thirty countries and a large membership. Numbered among its members are many of the surgical leaders of the world. It is therefore with a sense of pride that we welcome you even for a sectional meeting of the College and feel that you are bestowing an honor upon us." He also pointed out the many places of professional interest in and around Washington with their almost unlimited amount of

Dr. Henry W. Meyerding

Dr. Arnold S. Jackson

Dr. W. H. Sebrell

Dr. Laurence Miscall

Dr. C. E. Galloway

Dr. Charles P. Bailey (*right*) and participants in panel discussion on newer aspects of cardiac surgery

Dr. W. Bowdoin Davis

Members of Panel discuss gallbladder diseases

Dr. Harry E. Bacon

Dr. John L. Madden

Dr. Samuel M. Dodek

Dr. R. H. Bohlman

Dr. W. P. Ramsey

material of both clinical and research interest, making it a city eminently worthy to be chosen the meeting grounds for a medical congress. He did not neglect, however, to point out the cultural advantages and entertainments offered by the city, since this is of great importance in planning a meeting for any large group.

Several changes in the program for the scientific portion of the meeting had to be made when it was too late to announce them prior to meeting time. On Saturday afternoon **Dr. Arthur Vineberg,** F.A.C.S., of Montreal, Canada, spoke on the surgical treatment of coronary heart disease, and **Dr. Anthony Daniel Crecca,** F.A.C.S., of Newark, New Jersey, lectured on surgical treatment of pulmonary stenosis and lesions of the aorta. These papers replaced the announced talks by **Major Paul Schafer,** M.C., U. S. Army Medical Center, Walter Reed Hospital, Washington, D. C., and **Ormand C. Julian,** M.D., F.A.C.S., of Chicago, Illinois.

In spite of the very bad weather in Washington that weekend, with sleet and snow creating many traffic problems, the meeting was attended by a large number of Fellows and guests. The scientific program presented was so varied that it offered subjects of interest to everyone present, whether specialist or general surgeon. The lectures and panels were enthusiastically received and widely discussed.

The projects planned for entertainment were just as varied and provided an enjoyable and amusing session for everyone. The committee in charge of the meeting appreciated the good attendance and the many expressions of pleasure.

Regional Meeting Held in Bakersfield, California

The California Surgical Division of the International College of Surgeons held a regional meeting in Bakersfield, California, on Thursday and Friday, March 10 and 11, 1955.

A scientific lecture program, planned in committee under the chairmanship of **Dr. Robert F. Foote,** D.A.B.S., F.I.C.S., and **Dr. Ross V. Parks,** F.I.C.S., was scheduled as follows:

Program
Thursday, March 10, 1955

Morning Session

Carl L. Moore, M.D., F.I.C.S., *Moderator*

9:00 a.m. **Marion C. Barnard,** M.D., F.I.C.S., Bakersfield
Echinococcus as a surgical problem in the San Joaquin Valley

9:20 a.m. **J. Howard Varney,** M.D., F.I.C.S., Bakersfield
Bunion Treatment by Greenstick osteotomy, metatarsal base

9:40 a.m. **G. Wilbur Westin,** M.D., Los Angeles
Orthopedic Problems of Childhood

10:00 a.m. **Walter C. Graham,** M.D., F.A.C.S., Santa Barbara
Surgical care of the amputated finger

10:20 a.m. Intermission

10:30 a.m. **Kenneth B. Jacques,** M.D., F.I.C.S., Los Angeles
Common Medical Orthopedic problems

10:50 a.m. **Samuel W. Weaver,** M.D., F.A.C.S., F.I.C.S., Santa Ana
Differential diagnosis and treatment of low back problems

11:10 - 11:50 a.m. Panel discussion. Questions.

Lester J. Johnson, M.D., F.I.C.S., *Moderator*

GASTRO INTESTINAL BLEEDING

Marion C. Barnard, M.D., F.I.C.S., Bakersfield
Robert F. Foote, M.D., F.I.C.S., Bakersfield
Malcolm R. Hill, M.D., F.A.C.S., Los Angeles
James J. Morrow, M.D., F.I.C.S., North Hollywood

12:00 - 2:00 p.m. Luncheon
Guest speaker, **Walter E. Macpherson,** M.D., F.A.C.P., Los Angeles
President and Dean of Loma Linda College of Medical Evangelists

Afternoon Session

J. Howard Varney, M.D., F.I.C.S., *Moderator*

2:00 p.m. **J. W. Birsner,** M.D., Bakersfield
Pneumoperitoneum in localization of intra-abdominal pathology

2:20 p.m. **Rafe C. Chaffin,** M.D., F.A.C.S., F.I.C.S., Los Angeles
Abdominal fistula, prevention and cure

2:40 p.m. **Donald E. Ross,** M.D., F.A.C.S., F.I.C.S., Los Angeles
Cancer of the pancreas and its treatment

3:00 p.m. **Bert H. Cotton,** M.D., F.I.C.S., Los Angeles
Cardiovascular surgery

3:20 p.m. **Jack M. Moseley,** M.D., Santa Barbara
Cancer of the lung: Its Surgical Treatment

3:40 p.m. **Gerald L. Crenshaw, M.D., F.A.C.S.,** Oakland
Peripheral vascular disease of the lung

4:00 p.m. **Tracy O. Powell, M.D.,** F.A.C.S., F.I.C.S., Los Angeles
Subtotal cystectomy

4:20 p.m. **David Falk, M.D.,** Bakersfield
Your Urologist can save you embarrassment

4:40 p.m. **Harold Kay, M.D., F.A.C.S.,** Oakland
The danger of intravenous urograms

6:00 p.m. Cocktails

7:00 p.m. Dinner

8:00 p.m. Guest speaker, **Lyon Appleby, M.D.,** F.R.C.C., F.A.C.S., F.I.C.S., Vancouver, B. C., President, Canadian Section, International College of Surgeons
"The Ubiquitous Trail of the Serpent"

John H. Coker Jr., M.D., D.A.B., Or.S., *Master of Ceremonies*

Friday, March 11, 1955

Morning Session

Robert F. Foote, M.D., F.I.C.S., *Moderator*

8:20 a.m. **Douglas Dickson, M.D., F.A.C.S.,** Oakland
Orthopedic manifestation of oral sepsis

8:40 a.m. **Gerald B. O'Conner, M.D., F.A.C.S.,** San Francisco
Max W. McGregor, M.D., San Francisco
Management of facial injuries

9:00 a.m. **Leroy E. Smale, M.D.,** Bakersfield
Vaginal hysterectomy results in one hundred cases

9:20 a.m. **Emmet A. Pearson, M.D.,** F.A.C.S., F.I.C.S., Los Angeles
Benign and malignant lesions of vulva

9:40 a.m. **Maurice V. Sheets, M.D.,** Los Angeles
Lesions of cervix in pregnancy: Their diagnosis and management

10:00 a.m. **Charles Barone,** Pittsburgh
Premature placental separation

10:20 a.m. Intermission

10:30 a.m. **James B. Johnson, M.D.,** Beverly Hills
Common problems in plastic surgery

10:50 a.m. **Kathryn Stephenson, M.D.,** Santa Barbara
Parabiosis

11:10 - 11:50 a.m. Panel discussion
Donald E. Ross, *Moderator*

BILIARY DISEASES

Carroll J. Bellis, M.D., F.A.C.S., F.I.C.S., Long Beach
Grosvenor T. Root, M.D., F.A.C.S., Oakland
Buell H. Sprague, M.D., Los Angeles
Joseph L. Westover, M.D., Los Angeles

12:00 - 2:00 p.m. Luncheon
Guest speaker, **Paul C. Elliott,** Los Angeles, President of the California State Hospital Association

Afternoon Session

Clayton G. Gunderson, *Moderator*

2:00 p.m. **Earle Miller Marsh, M.D., D.A.B.,** Ob. and Gyn., San Francisco
Uterine bleeding in various age groups

2:20 p.m. **Gus Spitalny, M.D., F.A.C.S., F.I.C.S.,** San Francisco
Injuries to the Ureter

2:40 p.m. **Joseph L. Westover, M.D.,** Los Angeles
Radioactive isotopes in cancer therapy

3:00 p.m. **James J. Morrow, M.D., F.I.C.S.,** North Hollywood
Bowel Obstruction

3:20 p.m. **M. E. Morton, M.D.,** Long Beach
Radioactive collodis in surgery

3:40 p.m. **John B. Dillon, M.D.,** Los Angeles
General problems in cardiac arrest

4:00 p.m. **Lawrence E. Brown, M.D., F.I.C.S.,** Oakland
Surgical treatment of early anal infections

4:20 p.m. **Malcolm R. Hill, M.D.,** Los Angeles
Anal, rectal and sigmoidoscopic examinations with differential diagnoses (30 minute movie)

The subjects discussed proved of interest to the general surgeon as well as the specialist. As is usual at the scientific meetings of the College, these instructive and highly important papers were well presented and enthusiastically received by members and guests.

In addition to the lecture program the Division scheduled a cocktail hour for Thursday evening, followed by a steak dinner. Headquarters for the session was in the Bakersfield Inn, where many of the out-of-town doctors reserved rooms for the duration of the meeting.

The Netherlands Honors Dr. Morris Fishbein

Dr. J. B. V. M. J. van de Mortel, Netherlands Consul General at Chicago, Illinois, recently conferred upon **Dr. Morris Fishbein,** F.I.C.S. (Hon.), the Netherlands decoration, Officer in the Order of Orange-Nassau, for his work while a member of the chief editorial staff of *Excerpta Medica* which contributed greatly to the success and growth of the magazine and enabled it to render invaluable service to the medical world.

The decoration was presented to Dr.

Fishbein in the presence of his family and friends at a tea held in the library of his home in Chicago on Thursday afternoon, February 3, by Dr. van de Mortel.

Dr. Fishbein was born in St. Louis, Missouri, in 1889. After receiving his B.S. degree from the University of Chicago in 1910 he continued his studies at Rush Medical College and in 1912 was awarded his M.D. degree. Rutgers University conferred the degree of Doctor of Pharmacy upon him in 1942. He is a professorial lecturer in the University of Chicago School of Medicine and a clinical Professor of Medicine in the College of Medicine at the University of Illinois. He has gained world-wide renown for his writing for medical journals, working with the *Journal of the American Medical Association* from 1913 to 1949 and serving as editor of *Hygeia* for many years. He is foreign correspondent for a number of European medical journals and medical consultant for the *Encyclopaedia Britannica* and Doubleday and Company, Inc. He is also Consulting Editor of the *Journal of the International College of Surgeons.*

In 1949, President Truman presented him with the United States Certificate of Merit for outstanding achievement. He has also received decorations from Italy, Spain and Cuba.

Dr. Fishbein's exceptional ability and personality have won him an outstanding place in the medical publishing world, while his wit and versatility have assured him an enthusiastic reception on innumerable occasions throughout the world.

Annual Meeting of the American Institute of Dental Medicine

Hans Selye, M.D., F.I.C.S. (Hon.), Professor and Director of the Institute of Experimental Medicine and Surgery at the Université de Montréal, Canada, will be one of the seminar lecturers on the program presented at the next Annual Meeting of the American Institute of Dental Medicine which will be held at the Desert Inn, Palm Springs, California, from Oct. 23 to 27, 1955. He will discuss recent progress in the study of stress as applied to dental medicine.

Other seminar lecturers scheduled to speak at this meeting are: **Maury Massler,** D.D.S., University of Illinois, Chicago; **Valy Menkin,** M.D., Temple University Medical School, Philadelphia, Pennsylvania; **Reidar F. Sognnaes,** D.M.D., Harvard School of Dental Medicine, Boston, Massachusetts, and **Wendell L. Wylie,** D.D.S., University of California, San Francisco. These doctors will also participate in a round table forum discussing the application of their subject to the practice of Dental Medicine.

Further information may be obtained by writing the Executive Secretary, **Miss Marion G. Lewis, 2240 Channing Way, Berkeley 4, California.**

Annual Spring Congress Announced by Gill Memorial Hospital

Dr. Chevalier L. Jackson, F.A.C.S., F.I.C.S., will be an honored guest at the Twenty-eighth Annual Spring Congress in Ophthalmology, Otolaryngology and allied specialties at the Gill Memorial Eye, Ear and Throat Hospital in Roanoke, Virginia, from April 4 through April 9, 1955. On the fourth of April he will conduct a Clinic on the subject *Problems of the Technique in the Removal of Foreign Bodies from the Air and Food Passages,* and will speak before the Roanoke Academy of Medicine the same evening on cancer of the lungs.

This series of Congresses began in March 1927, with the first refresher course on ophthalmology and otolaryngology given by a hospital or medical school in the United States. Although such courses are now sponsored by numerous institutions, the attendance at the Spring Congress has increased steadily from year to year owing to the practical and informative program offered.

Each year a number of guest lecturers from various parts of the world contribute valuable lectures and hold highly interesting clinics in their fields of interest. In addition to Dr. Jackson, the guests of

honor for this year's Congress include **Dr. T. G. Martens,** D.A.B. (Ophth.), of Rochester, Minnesota; **Major General Daniel Ogle,** Sur. Gen., U.S.A.F., of Washington, D. C.; **Dr. Thomas Paine** of Birmingham, Alabama; **Dr. R. Townley Paton,** F.A.C.S., of New York City, New York; **Dr. A. D. Ruedemann,** F.A.C.S., of Detroit, Michigan, and **Dr. Franklin M. Foote** of New York City, New York. Many other doctors will present papers during this Congress on various phases of ophthalmology and otolaryngology.

The matriculation fee for the week of study is $75. Doctors attending must be ethical practitioners of medicine and members of their local medical societies. For those eligible for training under the G.I. Bill of Rights the Veterans Administration has authorized payment to the Gill Memorial Hospital for a period of training during the Spring Congress. Further information about this payment can be obtained from the local regional office.

Various social events have been planned for both the members and their wives, including a "get-acquainted" party on April 4 at 8 p.m. at Hotel Roanoke; a noon luncheon for members of the class at Hotel Patrick Henry as guests of the hospital; a buffet dinner at Hotel Patrick Henry following the lectures on April 5; a banquet at 7 p.m., April 6, for members of the class and their wives at the Hotel Roanoke, and a luncheon for the ladies of the party in the Pine Room of Hotel Roanoke on Thursday, April 7.

Dr. J. Kenneth Hutcherson, F.A.C.S., president of the Alumni of the Post Graduate Association of the Gill Memorial Eye, Ear, Nose and Throat Hospital, and members of the group, cordially invite all members of the medical profession to attend.

For information pertaining to qualifications for

FELLOWSHIP, ASSOCIATE AND JUNIOR MEMBERSHIP

in the United States Section
of the International College of Surgeons

Write KARL A. MEYER, M.D., F.A.C.S., F.I.C.S., Secretary
1516 Lake Shore Drive, Chicago 10, Ill.

Pakistan Section

American Surgeons Present Papers at Meeting of Pakistan Section

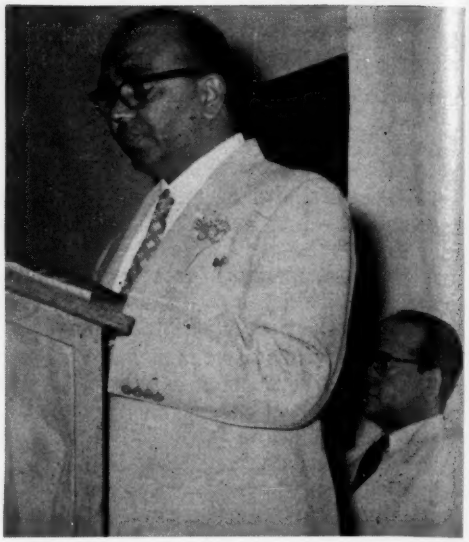
Thirteen Fellows of the United States Section of the International College of Surgeons delivered papers in a special lecture program planned for a recent meeting of the Pakistan Section Nov. 13 to 15, 1954, at Karachi, Pakistan.

The American surgeons flew from Bombay, India, where they had been guests of honor at the biennial meeting of the Indian Section, and arrived in Karachi at noon on Saturday, November 13. An official reception was held for the party from the United States on Saturday evening at the residence of **Lt. Col. A. K. M. Kahn, M.D., F.R.C.S. (India), F.I.C.S. Dr. Kahn** is President of the Pakistan Section and Dean of Dow Medical College, where the meetings of the lecture series were held. On Sunday morning **Dr. A. M. Malik,** F.I.C.S. (Hon.), Minister for Health, of the Government of Pakistan, welcomed the group of visiting Fellows. "We are fully conscious," said **Dr. Malik,** of the honor which the visit of our distinguished colleagues brings with it. It will prove a stimulus to Pakistani Surgeons in general and assist the local Section in widening the scope of our activities in proportion to the aims and spirit with which the College has been established." He expressed his gratitude to these busy men who were taking the time to present papers at this meeting and mentioned the hopes of Pakistani surgeons for the growth of the Section, pointing out that "the aim of the College is the pooling of scientific knowledge" and asserting his belief in the institution as "a true means of binding peoples of different races, colors, and creeds into a single homogeneous group." The people in Pakistan, he added, are always happy to see international brotherhood encouraged,

Members of U. S. Section of the International College of Surgeons met by reception committee at air port in Karachi, Pakistan, on arrival.

since "it is the very essence of our belief that the fundamental principles of equality and the brotherhood of man should be practiced unfettered all over the world." In concluding his address, **Dr. Malik** pointed out the fact that the Pakistan Section is only three years old, having been founded after a visit of **Dr. Ulysses Grant Dailey,** F.A.C.S., F.I.C.S., in 1951. He hoped that before long the College would be known to all surgeons and surgical personnel in Pakistan, and that in due course the Pakistan Section would be able to take its rightful place in the international field.

The Sunday morning session followed under the chairmanship of **Lt. Col. M. Jafar,** O.B.E., Director General of Health, and the following papers were presented: *Cardiac Arrest* by **Dr. Max Thorek,** F.B.C.S., F.I.C.S., F.P.C.S. (Hon.), F.R.S.M., D.C.M., of Chicago, Illinois; *Dupuytren's Contracture* by **Dr. Henry W. Meyerding,** F.A.C.S., F.I.C.S. (Hon.), of Rochester, Minnesota; *Epidermoid Carcinoma of Anal Canal; Ileopelvic Lymph Node Dissection; Ligation Inferior Mesenteric Artery at Aortic Origin; Bilateral Inguinal Node Dissection* by **Dr. Harry E. Bacon,** F.A.C.S., F.I.C.S., of Philadelphia, Pennsylvania; *Physical Law of Repair and the Healing of Wounds* by **Dr. W. C. Speidel,** F.I.C.S., of Seattle, Washington, and *Basal Temperature as a Guide to Ovulation* by **Dr. C. W. Mills,** F.I.C.S., of Norwalk, Connecticut.



Dr. A. M. Malik, Minister of Health, Government of Pakistan, inaugurates lecture program at Dow Medical College, Karachi.

Audience attending lecture at the Dow Medical College in Karachi, Pakistan on November 14, 1954

At Dow Medical College, Karachi, Pakistan.

After an interval for lunch the series of lectures continued under the chairmanship of **Lt. Col. A. K. M. Khan.** The following papers were offered: *Evolution of Surgery of the Gallbladder* by **Dr. Moses Behrend,** F.A.C.S., F.I.C.S., of Philadelphia, Pennsylvania; *Management of Goiter* by **Dr. J. Harry Hayes,** F.A.C.S., F.I.C.S., of Little Rock, Arkansas, and *Treatment of Acute Cholelithiasis in the Aged* by **Dr. S. J. Carnazzo,** F.A.C.S., F.I.C.S., of Omaha, Nebraska.

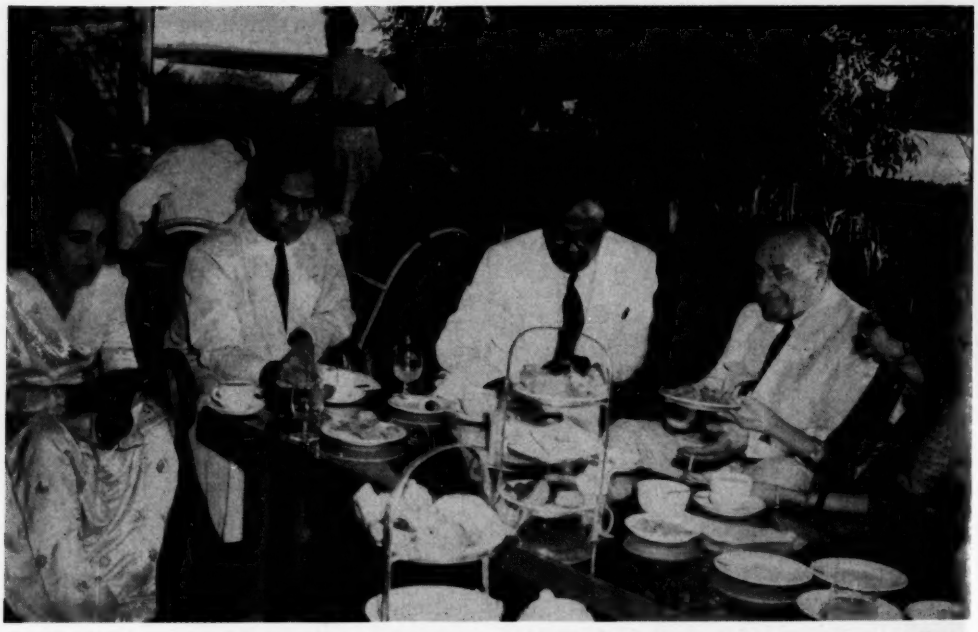
On Sunday, after the lectures scheduled for that day, a reception was given at the Beach Luxury Hotel by the **Hon. Dr. A. M. Malik** in honor of the American guests, followed by a dinner at the hotel under the auspices of the Karachi branch of the Pakistan Medical Association, at which an illustrated lecture on the International Surgeons' Hall of Fame was presented by **Dr. Thorek.**

On Monday morning the first session of the lecture program began, under the chairmanship of **Col. Jelal M. Shah,** O.B.E., F.I.C.S. (Hon.), at 9 a.m. with a paper presented by **Dr. Ulysses Grant Dailey,** F.A.C.S., F.I.C.S., of Chicago, Illinois, *Present Status of the Treatment of Peptic Ulcer.* This was followed by a lecture, *Management of Severe Gastric Hemmorrhage,* by **Dr. T. M. Rogers,** F.I.C.S., of Sterling, Colorado. A paper by **Dr. N. Mumey,** F.A.C.S., F.I.C.S., of Denver, Colorado, *The Importance of Early Diagnosis of Breast Tumor,* constituted the second portion of the morning lecture series under the chairmanship of **Dr. Riyaz-I-Quadeer,** F.R.C.S. (Eng.), F.I.C.S. The Secretary-General of the International College then expressed the appreciation of the guest surgeons from the United States Section for the outstanding hospitality they had been shown in Karachi, the attention and reception given the papers presented, the effort spent in organizing the series and the growth in influence and prestige of the Pakistan Section. He expressed all good wishes for continued success in the future.

A luncheon given in honor of the International College of Surgeons by **Mr. Edward V. Hopkinson,** representative of Parke, Davis and Company, Ltd., at the

Reception and dinner; Karachi, Pakistan.

Sind Club followed the close of the scientific program. The members and guests of the Pakistan Section then spent several hours sightseeing in Karachi and vicinity and visiting various medical institutions. Late in the afternoon they attended a tea



A view of the reception given by Dr. Malik in honor of the U. S. Surgeons at the Beach Luxury Hotel Karachi, Pakistan, on November 14, 1954.

given by the Ambassador of the United States, at his residence, 1 Bonus Road, Karachi.

In the evening the last event of the program took place: the Convocation, at which **Dr. Thorek** presented diplomas of Fellowship to the Fellows of the Pakistan Section. A dinner given at the Hotel Metropole by the Pakistan Fellows in honor of the American surgeons concluded, most appropriately, an altogether worthwhile and enjoyable experience.

The American surgeons left Karachi early Tuesday morning with unanimously happy memories of the delightful entertainment they had received in Pakistan and of the enthusiasm with which the scientific presentations had been received. These memories will not only be cherished for many years but will cement the friendship of the two groups into a solid struc-

Dr. and Mrs. Malik (left to right) at reception in Pakistan.

Reception in Karachi, Pakistan, November 14, 1954.

Photograph of the visiting U. S. Surgeons taken at Dow Medical College, Karachi, Pakistan, on Nov. 14, 1954, where a lecture program was organized in their honor by the Pakistan Section of the International College of Surgeons. Picture shows, left to right: (Front row) Col. M. Jaffar, Director-General of Health, Pakistan; Dr. Vogan; Dr. Meyerding; Dr. Mills; the Hon. Dr. A. M. Malik, Central Minister for Health and Works and Labour; Dr. Max Thorek, Founder of the International College of Surgeons; Dr. Dailey; Dr. Behrend; Dr. Spiedel; Dr. Hayes; Dr. Caldwell, and Dr. Carnazzo. (Back row) Fellows of the Pakistan Section of the International College of Surgeons.

ture of fraternity both personal and professional.

At the dedicatory meeting of the Pakistan Section, three men were made Honorary Fellows of the International College of Surgeons. The qualifications and records of these men are outstanding. Briefly, they are as follows:

The **Hon. Dr. A. M. Malik: Dr. Malik** was born in Chuandanga, East Pakistan, in 1905, and was educated at Bogra, Bankura and Calcutta. He also studied at Rabindranath Tagore's University at Santiniketan. In 1932, after passing the final examination of the State Medical Faculty of Bengal, he entered the University of Vienna for postgraduate work in ophthalmology under the renowned **Prof. Dr. M. Sachs.** Returning to Calcutta, he established his own practice in his chosen field. Until 1948 he held the post of Honorary Ophthalmic Surgeon and Teacher at the Campbell Medical School and Hospital. Since then, as a signal public acknowledgment of his ability and devotion to his profession, he has held the portfolio of Labour, Health and Works in the Cabinet of the Pakistan Government.

In addition to his professional activities, **Dr. Malik** has participated in many social services, including slum clearance and the work of the Red Cross, and he has been no less active in the political arena. In 1936 he joined the Muslim League and the All India Trade Union Congress, becoming Vice President of the Bengal Provincial Trade Union Congress, and a member of the Executive Council o the parent organization. After the estab

The Hon. Dr. A. M. Malik, F.I.C.S. (Hon.)

lishment of Pakistan as a separate nation he was elected the first President of the All Pakistan Federation of Labour. In 1931 he was elected to the governing body of the International Labour Organization and in 1953 became its Chairman.

The quality of Dr. Malik's achievements as a surgeon has been no whit lessened by the diversity of his interests or the demands upon his time and energy involved therein. He remains one of the most deservedly eminent surgeons of Pakistan as well as a notably effective member of the Government of his country. We are proud to receive him as an Honorary Fellow in the International College of Surgeons.

Col. M. K. Afridi: Born in 1899, at the turn of the century, Col. Afridi has made a remarkable record in medicine, particularly in his specialty, the prevention and treatment of malaria. He joined the Indian Medical Service in 1924 and for six years was engaged in general military medical duties. Placed in charge of the Military Laboratory and given a staff appointment in pathology, he continued his research until January 1936, when he was appointed Assistant Director of the Malaria Institute of India. In 1940 he was recalled for overseas military service, working as a specialist in malaria in Iraq and the Sudan until January 1942. He was then appointed Assistant Director of Malariology at General Headquarters in India. Two years later he was promoted to the rank of Consulting Malariologist for the Southeast Asia Command of the Allied Land Forces.

Col. M. K. Afridi, C.B.E., M.D., D.T.M. and H. (Lon.), F.I.C.S. (Hon.)

Recalled from this service after the war, Col. Afridi was assigned as an officer on special duty to the Director General of the Indian Medical Service, to assess the availability of scientific personnel trained in combatting malaria. In April 1946 he became Deputy Director, and in August 1947 Director, of the Malaria Institute of India. After the creation of Pakistan he was made Director of the newly established Malaria Institute of Pakistan and the Bureau of Laboratories at Karachi. In 1949 he became Deputy Director of the Regional Office in Alexandria for the Eastern Mediterranean, World Health Organization. In this capacity he served until he was recalled to duty in Pakistan as Surgeon General to the Government of East Bengal, Dacca. In 1952 he became Director of Health Services for the Northwest Frontier Provinces, serving both as Surgeon General and as Director of Health Services in administrative control of medical education and medical aid throughout the provinces. The value of his work in this position is obvious, and the personal and professional integrity that distinguish his career will distinguish him also as a most valuable acquisition to the International College of Surgeons.

Col. Jelal M. Shah: Col. Shah qualified as M.R.C.S. (Eng.) and L.R.C.P. (London) in July 1915, at St. Bartholomew's Hospital in London, and served for six months as Junior House Surgeon under the late **Sir Holburt Waring.** After joining the Army as temporary I.M.S. officer, he served six months more before going on active duty in Gallipoli, the Western desert, Egypt, Pakistan and Syria. He was with the Army of Occupation in Turkey after the signing of the armistice. In 1920, after another six months as chief assistant to the late **Sir Victor Horsley** of University College Hospital in London, he was transferred to Transcaspia and Northeast Persia, having been appointed G.S.O. III with the British Military Mission. In the course of his military career Col. Shah was twice wounded in action and repeatedly mentioned in military dispatches. Among the honors awarded him were the rank of M.B.E., Military Division, and a permanent Commission I.M.S.; he was also made an O.B.E. for his services to the Military Mission.

On his return to India in 1922, **Col. Shah** was assigned as Surgical Specialist to the Southern Command. He held this post until 1926, when he joined the staff of the Director-General of the Indian Medical Service of New Delhi and Simla. In 1927 he became a member of the Surgeon General's staff in the Bombay Government. From 1929 to 1931 he was in England doing post-graduate work in the field of venereal disease, which led to his later service in India as Advisor in Venereology to the Bombay Government.

Col. Jelal M. Shah, O.B.E., M.D., M.R.C.S. (Eng.), L.R.C.P. (Lon.) F.I.C.S. (Hon.)

In April 1939 **Col. Shah** left Bombay on a long leave pending his retirement from the service, but the outbreak of the second World War in 1939 called him back to duty. He took over the post of Principal of Grant Medical College and Superintendent of the J. J. Hospital, where both Indian and British casualties were treated. He was an elected Fellow, a member of the Academic Council and President of the Board of Sports of the University of Bombay for many years. He was also the first President of the Association of Dermatologists and Venereologists of Bombay; a member of the Medical councils of India and Bombay; a Fellow of the College of Physicians and Surgeons of Bombay; Chairman (for three years) and Honorary President of the Venereal and Dermatological Section of the Bombay Medical Congress, and a Magistrate and Justice of the Peace for the City and Island of Bombay. At the instance of **Quaid-E-Azam,** he went to Pakistan after the division of India and has since held many positions in the Pakistan Government, for which he is now Deputy General of the Health Department.

In recognition of **Col. Shah's** services to Bombay, his friends and former students established a foundation in his name, the proceeds of which are used to defray the expenses of needy medical students. The additional recognition of Honorary Fellowship in the International College of Surgeons honors the College as well as Col. Shah, who is warmly welcomed into our membership.

Pakistan, a new but valiant nation, is held in high regard by all Fellows of the College for the earnestness with which it has attacked its many problems and the remarkable progress it has made toward solving them. In the field of medicine this progress is prodigious, as is attested by the careers of these three eminent devotees to its cause.

Correction: In the January issue of the Bulletin, through a most regrettable accident, the four Venezuelan surgeons represented on page 85 were erroneously ascribed to Colombian surgical history. The sincere apologies of the editorial staff are extended to the Venezuelan Section.

Venezuelan Section

Great Venezuelan Surgeons of the Past

In the beautiful Venezuelan room of the International Surgeons' Hall of Fame on Lake Shore Drive in Chicago, the fine sculptures shown in the photograph below commemorate four Venezuelan surgeons whose lives and work are still cherished in the hearts of their countrymen.

The periods during which these men lived and worked were obviously very different from our own. Even Dr. Razetti, whose career ended in 1932, was very far from having the many facilities most surgeons have today. Yet he and hundreds of others before him performed miracles of surgery in their times. There is no greater evidence of the indomitable spirit of man than can be found in even a cursory glance at the history of medicine and surgery. It is well to pause for an occasional backward glance, if only to make us appreciate present blessings. The very keystone of the International Surgeons' Hall of Fame is the recognition of the fact that many of the successful operations that bring us such stimulating satisfaction today were performed by our forebears under handicaps that would seem insurmountable to a modern surgeon. The only possible conclusion is that what these men lacked in equipment and scientific knowledge they made up in ability and devotion.

In Venezuela these qualities continue to vitalize science. The Venezuelan Section of the International College of Surgeons, from the day of its foundation, has given proof of the scientific integrity and the idealistic vision that make greatness possible. In honoring the great men of the past, we honor no less those among whom will be found the great men of the future.

Giants of Venezuelan surgery, as immortalized in the Venezuelan Room of the International Surgeons' Hall of Fame.

Austrian Section

Business Meeting and Election

The Austrian Section of the International College of Surgeons held a business meeting and election of officers on Tuesday, January 11, 1955, in the first Surgical Clinic of the University of Vienna in Vienna, Austria.

Prof. Dr. L. Schönbauer opened the meeting with a report on the material already sent to the Surgeons' Hall of Fame for display in the Austrian Room. This was followed by an announcement by **Prof. Dr. Felix Mandl** with regard to the proposed meeting to be held in Vienna this year and by the report of the Treasurer, **Prof. Dr. R. Oppolzer,** which had been approved by the auditing committee, **Prof. Drs. E. Schlander** and **H. Steindl.**

The election of officers was then held and resulted in the selection of the following men to direct the organization through the year:

PRESIDENT: **Prof. Dr. L. Schönbauer**
VICE PRESIDENT: **Prof. Dr. T. Antoine**
SECRETARY: **Prof. Dr. F. Mandl**
TREASURER: **Prof. Dr. R. Oppolzer**

SPECIALTY REGENTS:

GENERAL SURGERY:
Prof. Dr. P. Huber
GYNECOLOGY:
Prof. Dr. H. Heidler
UROLOGY:
Prof. Dr. R. Ubelhör
OTORHINOLARYNGOLOGY:
Prof. Dr. E. Schlander
ORTHOPEDICS:
Prof. Dr. Ph. Erlacher
CASUALTY SURGERY:
Prof. Dr. L. Böhler

AUDITING COMMITTEE:
Prof. Dr. E. Schlander
Prof. Dr. H. Steindl

Doz. Dr. H. Kraus was admitted to membership in the Austrian Section immediately after the election of officers. The members of the Section then discussed the early beginnings of the College, its growth and development, its adherence to the ideals and principles established and its potential position in the creation of a more promising future for the world.

Indian Section

Indian Section Announces Meetings

The Indian Section of the International College of Surgeons is planning to hold its Annual Congress on Dec. 30, 1955, at Amritsar, East Punjab, India, in joint session with the Annual Conference of the Indian Association of Surgeons.

In addition, the South Indian Division of the Section has announced that it will hold a regional meeting in August 1955 at Vellore, South India.

Woman's Auxiliary

Auxiliary Activities at Mid-Atlantic Division Regional Meeting

Mrs. **V. T. DeVault,** representing the Woman's Auxiliary Board, joined with Mrs. **James W. Watts, Mrs. J. Ogle Warfield Jr., Mrs. O. Hugh Fulcher, Mrs. Emil Hildenbrand, Mrs. Harvey H. Ammerman,** Mrs. **Jonathan Williams, Mrs. William C. Meloy, Mrs. Alfred Jackson** and **Mrs. V. S. Lambros** to form a reception and registration committee for the Mid-Atlantic Division Regional meeting of the International College of Surgeons at Washington, D. C., serving from Thursday morning, February 11, to Saturday noon, February 13.

In spite of a blizzard which made it extremely difficult to find transportation, a large group of women were present at the tea given in the Pan American Union Building, where the Secretary General of the Organization of American States received the visiting group with his wife, **Mrs. Davila,** and a group of the wives of other South American diplomats. Mrs. Davila, who was born in Boston, Massachusetts, and has become a writer of note, personally conducted the guests through the building, pointing out things of special interest. The tea table was beautifully arranged with a wide assortment of South American delicacies that were both attractive and delicious. Unhappily, many of the members of the Auxiliary and Latin American women invited to meet them by Mrs. Davila were unable to be present owing to the storm.

On Friday evening the banquet for the members and their wives and guests was held. Although the snow and sleet continued to create difficulties in traveling, there was an excellent attendance at the dinner and everyone enjoyed the well planned meal and the program which followed. **Dr. Max Thorek,** Secretary General of the International College of Surgeons, gave an interesting lecture about the Surgeons' Hall of Fame in Chicago, Illinois. He illustrated his talk with photographic slides.

Saturday morning Auxiliary members and their guests visited the White House and were thrilled to see this lovely mansion, which has been made more beautiful than ever by the restoration and renovation recently completed.

Many of the visitors made it a point to thank the committee and comment on the fine fellowship engendered by the session. Mrs. DeVault feels that the success of the meeting was the result of the friendly personal contacts that were made.

Luncheon Given in Honor of President-elect

On Monday, Feburary 21, **Mrs. Clifton L. Dance,** President of the New York Division of the Woman's Auxiliary and President-elect of the Woman's Auxiliary of the United States Section, was honored at a luncheon given for her by fellow members of the Auxiliary at the Columbia University Club, 4 West 43rd Street, New York City.

Mrs. Floyd Keir, First Vice-President of the New York Division, presented an official auxiliary pin to Mrs. Dance as a token of recognition by members of the New York Division of the Auxiliary for her excellent leadership as President.

Woman's Auxiliary Memorial Fund

We wish to call the attention of every member of the International College of Surgeons and of the Woman's Auxiliary to the Memorial Fund which was established in 1954 for use in promoting surgical research. Gifts of one dollar or more will be greatly appreciated. A handsome card will be sent to the family of the person the donor chooses to honor in this way.

Mrs. Donald L. Dickerson is chairman of the Woman's Auxiliary Memorial Fund. You may get printed blanks, to use in making your gifts, from Mrs. Dickerson, 2315 North Vermilion, Danville, Illinois.

General News Notes

National Society of Surgery Elects Officers

Dr. Julio Sanguily Quintana, of Havana, Cuba, President of the National Society of Surgery, sends his greeting to all members of the International College of Surgeons and announces the recent election of the following officers:

President: **Dr. Julio Sanguily Quintana**

Vice-President: **Dr. Gustavo Cuervo Rubio**

Secretary: **Dr. Hilario Anido Fraguio**

Vice-Secretary: **Dr. Juan Bolivar Ferrer**

Treasurer: **Dr. Luis F. Ajamil Valverde Salazar**

Vice-Treasurer: **Dr. Antonio Carbonell**

Election Committee: **Dr. Eugenio Torroella Mata**
Dr. Pedro Sanchez Toledo
Dr. Vincente Banet Pina

These officers, elected for two years, will lead and direct the affairs of the National Society of Surgery during 1955 and 1956 with the same personal integrity and high ideals that have been followed by their predecessors.

French Academy Honors Dr. Juan Nasio

Dr. Juan Nasio of Rosario, Argentina, Director of the International Book of Gastroenterology, was recently awarded the George Dieulafoy Prize by the National Academy of Medicine of France for his researches on peptic ulcer.

After presenting several lectures in Europe, Dr. Nasio visited Canada, where he conducted a conference at the University of Montreal under the sponsorship of **Dr. Hans Selye,** F.I.C.S. (Hon.), Professor and Director of the Institute of Experimental Medicine and Surgery. In March Dr. Nasio will follow this conference with a visit to the United States, where he will discuss his work on stress from the gastroenterologic point of view and on radiologic studies of the motility of the small intestine.

Damon Runyon Cancer Fund Aids Research on Melanoma

Research into the development of melanoma, one of the most malignant forms of cancer, will be aided by a third grant from the Damon Runyon Cancer Fund to **Dr. H. Clark Dalton,** associate professor of biology at New York University's Washington Square College of Arts and Science.

Three thousand two-hundred dollars was recently presented to **Dr. Dalton** by **Harold F. Crawford** and **Bennett L. Kulak** of the Fraternal Order of Eagles, who are the largest single contributors to the Damon Runyon Cancer Fund, having donated more than $500,000 to date.

Dr. Dalton has now received a total of $9,200 from the fund for support of his research program into "Control of Melanophore Differentiation by Skin Tissues." **Dr. Dalton** is attempting to find the genetic foundations which control the development of pigmented cells, explaining that "abnormal growth of pigmented cells" leads to melanoma.

The research is trying to chart the course of normal pigmented cell development to find the controlling mechanism which may go awry, giving rise to the melanoma.

New Manual for Surgical Nurses

Extensive study and countless hours of consultation in the surgical field has produced a manual, *Operating Table Usage,* simple and direct in its treatment of the postural technics common to major and minor operations. Published by the American Sterilizer Company, the manual is for use by the assistants on the surgical team.

Written in layman's language, with schematic drawings illustrating surgical postures, this manual gets down to fundamentals.

It is available, on request, from American Sterilizer Company, Erie, Pennsylvania.

In Memoriam

FREMONT A. CHANDLER

M.D., F.A.C.S., F.I.C.S. (Hon.)

On Christmas Eve, 1954, the sudden and unexpected death of Fremont A. Chandler brought to a close the career of one of the world's great orthopedic surgeons.

Born in Chicago, Illinois, on Nov. 29, 1893, Dr. Chandler took his B.S. degree at the University of Wisconsin in 1916 and in 1919 received his degree of Doctor of Medicine from the College of Physicians and Surgeons of Columbia University. After interning at the Sloane Maternity Hospital in New York City and the Hartford Hospital at Hartford, Connecticut, in 1919 and 1920, he spent a year as resident physician at the Grenfell Hospital in St. Anthony, Newfoundland, Canada, where he met his future wife, Eleanor Cromwell of New York City, a nurse's aide at the hospital. Upon his return to New York City in 1921, he became resident in orthopedic surgery at the New York Orthopedic Dispensary and Hospital and remained in that service until 1924. This was the beginning of his long and outstanding career in orthopedic surgery.

In 1924 Dr. Chandler married Miss Cromwell and returned to Chicago to begin his personal practice in his chosen field of surgery. He was affiliated with St. Luke's Hospital throughout his years of practice in Chicago, working under two of Chicago's outstanding orthopedic surgeons, Drs. Ryerson and Porter. In 1924 he was appointed instructor on the faculty of Northwestern University School of Medicine and later advanced to the rank of associate professor. In 1943, he left Northwestern to become professor of orthopedic surgery and head of the department in the medical school and the Research and Educational Hospital at the University of Illinois School of Medicine in Chicago. He joined the staff of the Children's Memorial Hospital in 1925 and was appointed chief of the Orthopedic Department there in 1931, serving in that capacity until 1943, when the pressure of other work forced him to leave the staff. At various times he was associated with six other hospitals in the Chicago area.

A member of many medical societies and an author of distinction, one of his greatest honors came in 1950 when he was made President-elect of the American Orthopedic Association, serving, in 1952, as presiding officer for the noted London meeting of the six English-speaking orthopedic associations. At this time he received from Queen Mother Elizabeth the Jewel of Office which the British Orthopedic Association presented to the president of each orthopedic association participating.

Undoubtedly the greatest contribution made by Dr. Chandler to orthopedic surgery in the United States was the establishment, in 1934, of the American Board of Orthopedic Surgery in cooperation with Drs. Henderson, Ryerson, Campbell and others. This was one of the milestones in the history of orthopedic surgery. Dr. Chandler was the first secretary of the Board and remained in that office until 1941, when he became president. His work with the Board was a contribution for which all orthopedic surgeons will be forever grateful.

In addition to his original technics and unique abilities as a surgeon, he was an inspiring and meticulous teacher, willing to help his students to the utmost but demanding, in return, their best efforts. A man of definite opinions, he was nevertheless able to see his own errors and capable of changing when he was convinced that he was wrong. This lack of rigidity is always the sign of a great mind and a great man. His work was not only his vocation but his avocation. He enjoyed working in his shop in his own home and often created instruments for special operations. In the early 1930's he developed the forerunner of the present motor saws, but was

never satisfied that he had eliminated the "bugs" from his own instrument.

Dr. Chandler, better known to his intimates as "Mont," was admired by all who knew him for his sincerity, conscientiousness, frankness and integrity. His personality was so dynamic that it stimulated all those who came in contact with him. His vitality and his tremendous capacity for work drove him to set a heavy schedule for himself, yet he was never satisfied with less than perfection. Extremely kind, warm-hearted, and with a good sense of humor, he had the fundamental dignity and graciousness found in the true gentleman. At the time of his death he was a Vice-President of the International College of Surgeons, of which he was an Honorary Fellow. The principles and ideals of the College so closely paralleled those governing his personal life and practice that he was always willing to work to further them in any way he could. He considered the College a source of help and inspiration to thousands of surgeons in many countries and believed that it helped to promote good will throughout the world. Only a few days before his death he attended a meeting of the Executive Council of the International College, a body of which he was proud to be a member. In 1954 he was commissioned by the College as Surgeon Ambassador of Good Will, along with his friend and colleague, Dr. Edward L. Compere, F.A.C.S., F.I.C.S., and together they attended the International Congress of the College held in São Paulo, Brazil. His time, his energy and his great ability were given happily to the work of the College.

In his presidential address to the American Orthopedic Association, Dr. Chandler concluded by saying, "As I leave office, my most sincere wish for all of you is that you may be receptive of the tribute paid to the doctors by Jeshua in the second century B.C., when he said, 'The skill of the physician exalts him and he is admired among the great'."

Fremont A. Chandler was a worthy example of Jeshua's ideal. He was "admired among the great" of his own day, and as long as surgery continues will be remembered with pride and admiration by his fellow surgeons.

EDWARD L. COMPERE
M.D., F.A.C.S., F.I.C.S.

WILBERT ASHTON LIEBELER

M.D., F.A.C.S., F.I.C.S.

It is with great regret that we announce the death on Nov. 5, 1954, of Dr. Wilbert Ashton Liebeler. Born in Langdon, North Dakota, on Dec. 7, 1897, he graduated from the Langdon High School and then registered at the University of North Dakota for premedical study and courses in Fine Arts. He received his B.A. degree in 1921, and went to the University of Illinois College of Medicine in Chicago, where, in 1925, he was awarded the degree of Doctor of Medicine. After interning at Milwaukee General Hospital and Milwaukee Children's Hospital from June 1924 to July 1925, he returned to the University of North Dakota dispensary, where he served from 1925 to 1931. He has taught at the University of North Dakota in premedical courses and has been on the teaching staff at the School of Nursing at Deaconess Hospital and at St. Michael's Hospital in Grand Forks, North Dakota, where he made his home and established his surgical practice.

Dr. Liebeler was a member of the North Dakota District and State Medical Societies, the North Dakota Obstetricians and Gynecologists Society, and a Fellow of the American College of Surgeons and the International College of Surgeons. He was a staff member of Deaconess Hospital and St. Michael's Hospital. He wrote a number of papers on general surgery and obstetrics and added valuable material to the literature in these fields.

An enthusiastic and alert member of the College, Dr. Liebeler will be missed by his colleagues as well as by his more intimate personal friends. The loss of so capable a surgeon is felt both in his community and in the world of surgery.

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Section II

Bulletin of Meetings—Announcements

National and International Activities

Vol. XXIII *April, 1955* No. 4

INTERNATIONAL COLLEGE OF SURGEONS

SCHEDULE OF MEETINGS

INTERNATIONAL—NATIONAL—REGIONAL

INTERNATIONAL

1955

May 23-26	Twentieth Anniversary Meeting	Geneva, Switzerland
Oct. 12-16	Third Congress, Brazilian Section	Belo Horizonte, Brazil
Oct. 22-23	Meeting of Austrian Section	Vienna, Austria
Oct. 30	Second Congress, Japanese Section	Tokyo, Japan

NATIONAL: UNITED STATES AND CANADIAN SECTIONS

Sept. 12-15	Convention Hall	Philadelphia, Pennsylvania

REGIONAL

July 1-4	Chatham Bars Inn	Cape Cod, Massachusetts

1956 INTERNATIONAL

Nov. 19-24	Tenth Biennial International Congress	Buenos Aires, Argentina

At the Invitation and Under the Sponsorship of the Argentine Government

NATIONAL: UNITED STATES AND CANADIAN SECTIONS

Sept. 9-13	Palmer House	Chicago, Illinois

1957 NATIONAL: UNITED STATES AND CANADIAN SECTIONS

Sept. 8-12	Palmer House	Chicago, Illinois

1958 NATIONAL: UNITED STATES AND CANADIAN SECTIONS

Sept. 7-11 Atlantic City, New Jersey

The Journal of the International College of Surgeons

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Section II

Bulletin of Meetings — Announcements
National and International Activities

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Section II

Bulletin of Meetings—Announcements

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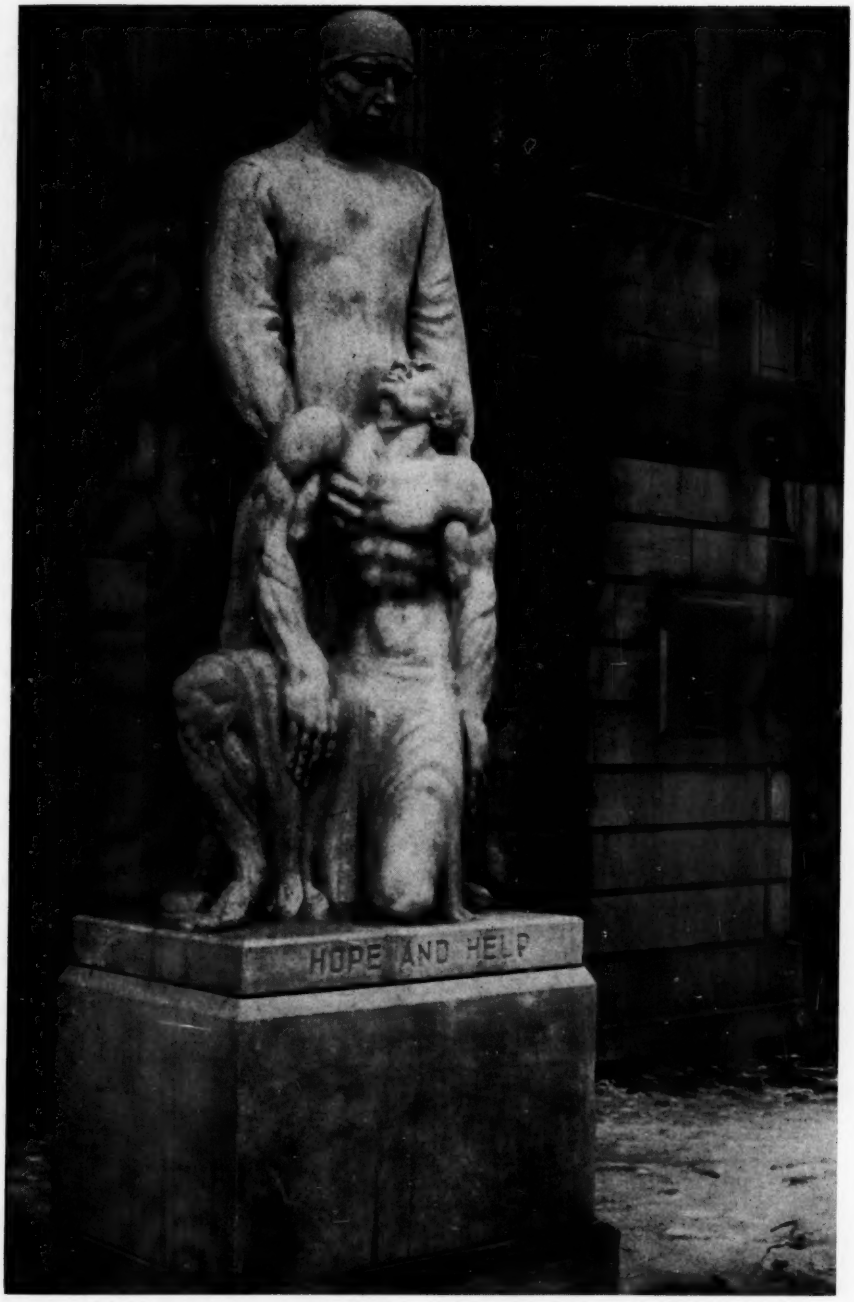
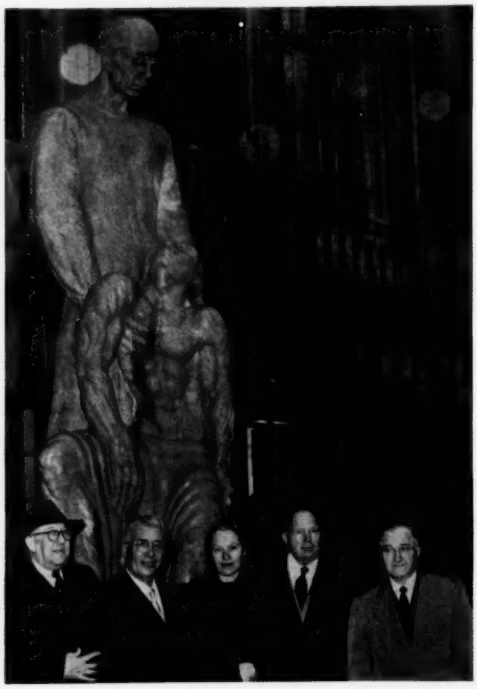


Symbolic figure of "Hope and Help" at entrance of the International Surgeons' Hall of Fame, International College of Surgeons.

Dedication Ceremonies

A large group of visiting dignitaries, Fellows, members of the Woman's Auxiliary and officers of the International College of Surgeons met at the Home of the College, 1516 Lake Shore Drive, on Saturday, Feb. 19, 1955, at 2:30 p.m., to attend the dedication of a statue symbolizing the ideals of the International Surgeons' Hall of Fame and Museum of Surgical Science.

The statue, which bears the inscription "Hope and Help," represents a surgeon giving aid to his patient and stands at the entrance to the Surgeons' Hall of Fame at 1524 Lake Shore Drive. This heroic piece is the work of Edouard Chassaign of the Art Institute of Chicago, the sculptor who has executed a number of the life-sized figures in the Hall of Fame. **Dr. Max Thorek,** Founder of the College, formulated the idea for the statue.

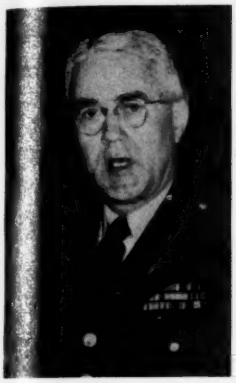


At dedication: *Left to right,* Drs. Morris Fishbein, August Daro, Ilza Veith, Ross T. McIntire and Karl A. Meyer.

Dr. George F. Lull, F.A.C.S., F.I.C.S. (Hon.), Secretary General of the American Medical Association, was the first speaker on the program for the dedication ceremonies. **Col. Hugh R. Gilmore Jr.,** Curator of the Medical Museum, Armed Forces Institute of Pathology, followed Dr. Lull. He spoke on the worthiness of the creation of the Hall of Fame and the Museum of Surgical Science. "It is a splendid undertaking," he said, "and it must be a source of great satisfaction to all to see the plans so near completion. The progress made since this building was purchased by the International College of Surgeons in 1953 is a tribute to the energy of Dr. Thorek and his committee on arrangements, headed by **Dr. Rudolf Nissen** of Switzerland and **Dr. Morris Fishbein** of Chicago.

"In the United States," continued Dr. Gilmore, "we have been rather slow to pay tribute to our famous colleagues. In the city of Washington there are only four statues of doctors. One is in the Capitol rotunda, where each state is allowed space for two of its famous sons. Georgia has chosen Crawford W. Long, who, with Morton of Massachusetts, was one of the first to use ether for anesthesia. A statue of Samuel Hahneman, founder of homeopathy, stands near Scott Circle, and a statue of Samuel D. Gross, the Philadelphia surgeon, is near our Medical Museum. The fourth figure is Benjamin Rush, a signer of the Declaration of Independence and one of the early leaders in American Medicine. This statue is on the grounds of the old Naval Hospital.

"We have also been somewhat laggard in our appreciation of medical history and in support of historical medical museums," Dr. Gilmore added. "Sigerist, in the first volume of his *History of Medicine*, published in 1951, includes a list of historical medical museums here and abroad. In the United States he mentions only five—one in Cleveland, one at Johns Hopkins, one at Yale, one at the University of Kansas and one at the Medical Museum in Washington. The Mutter Museum of the Philadelphia College of Physicians might be added to this list. Some of our larger museums, such as the Smithsonian, have sections devoted to medical history.



Col. Hugh R. Gilmore Jr., of Washington, at microphone.

"One of the famous museums of the world is the Museum of the Royal College of Surgeons in London, also known as the Hunterian Museum, since it was founded by John Hunter. A prized possession of this museum is the skeleton of an Irish giant, said to have been eight feet tall. John Hunter knew this man in life and attempted to bargain with him for the possession of his remains. The subject, however, rejected all inducements and left a sum of money in his will to insure his burial at sea in a sealed lead casket. But Hunter had the opportunity to outbid the deceased and by paying 500 pounds to the executors, he procured the body and removed it secretly to his country home, where he had a copper tub for boiling bones from the flesh. Hunter must have been a rather sardonic person in general, for the story is told that on one occasion he asked the porter to bring a skeleton into his lecture room, so that he might preface his remarks with the word 'Gentlemen'!

"Medical men have been commemorated by stamps and by medals, but comparatively few Americans have been so honored. In our collection of over three hundred medical stamps there are only three that recognize American doctors: Long, Walter Reed and Gorgas. Of two thousand medical medals, only the names of Rush, Beaumont, McDowell, Theobald Smith, Walter Reed, Sternberg and Gorgas appear.

"It is most appropriate, then," Dr. Gilmore concluded, "that space be set aside here in Chicago to honor the medical 'greats,' not only of our own country, but of the world. For medical fame is not merely a matter of national pride. Fame in medicine is due to those who help mankind, regardless of race, creed or nationality. Medical discoveries are not and must never be the secret of an individual doctor or nation. Here in this Hall of Fame we shall see portrayed the great recent advances in medicine, and we note that the twelve immortals selected come from many different countries; Imhotep the Egyptian; Hippocrates the Greek; Galen, who was born in Asia Minor, but who spent much of his life in Rome; Paré, Pasteur and Marie Curie of France; Vesalius and Morgagni, both Professors of Anatomy at Padua in Italy; Semmelweiss of Vienna; Harvey and Lister of England and Scotland, and Roentgen of Germany. It is most fitting that this be an international undertaking, and let us hope that it may play its due part in promoting international good will and friendship."

Section of audience at the dedication of the statue.

Dr. Ilza Veith, President of the Society of Medical History of Chicago, followed Col. Gilmore, with a tribute to the work of the Hall of Fame and to the statue being dedicated. She said, "The two most significant words in the history of medicine are *Hope* and *Help.* They are symbolized by this magnificent statue, which we have the honor of dedicating today.

Dr. Ilza Veith at the microphone.

From the early dawn of civilization, words have been the foundation of the healing art, and throughout the ages they have been the motivating forces in the great achievements of modern medicine and surgery. The statue of the surgeon extending his helping hands to a suffering fellow man is eternally and universally representative of the spirit of medicine.

"Eternal values are often forgotten in today's age of science. Yet without knowledge of the past we cannot fully understand the present.

"When Dr. Thorek inspired the creation of the Hall of Fame of the International College of Surgeons, he gave the profession a key to the past and its universal and eternal values," Dr. Veith continued. "The Hall of Fame memorializes the evolution of surgery. Its planners, however, have reached far beyond that. Statues of twelve medical immortals will grace the Hall of Fame, ranging from Imhotep, the earliest known physician of ancient Egypt, to a Nobel Prize Winner in physical chemistry, Marie Curie. They include Hippocrates and Galen, William Harvey and Morgagni, Semmelweiss and Pasteur and Roentgen. Two names, those of Ambroise Paré and Joseph Lister, were chosen specifically from surgical history; the others were selected from among the great in the whole field of medicine and the allied sciences, because their philosophy, their achievements and their discoveries became fundamental not for surgery alone, but for the art of healing in all its manifestations.

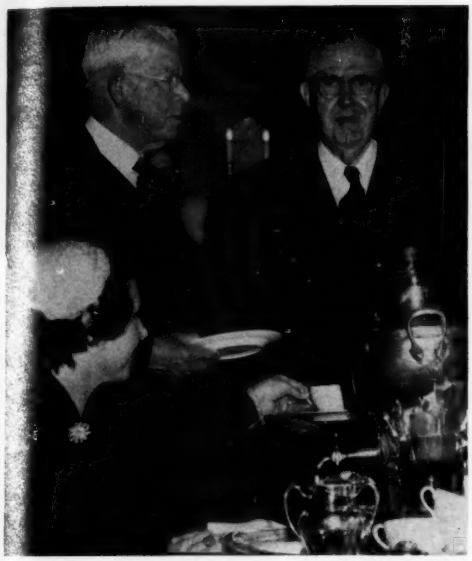
"Medicine and surgery as we know them now grew out of the many centuries, the many skills and the many nations represented by these immortals. This intellectual and geographic interdependence is demonstrated strikingly in a flight of rooms in the Hall of Fame. Here the countries represented in the International College of Surgeons will have permanent displays of their own surgical and medical treasures," Dr. Veith stated.

"Each of these exhibits is typical of one specific country, yet all of them share the motivating spirit that speaks through their portraits and paintings, through their instruments and inventions — the spirit of Hope and Help. Sir William Osler, the famous clinician, once said: 'The great republic of medicine knows and has known no national boundaries.' The message of his words is borne out by the Hall of Fame and by the spirit of this monument."

Following the address by Dr. Veith were comments by **Dr. Morris Fishbein,** Chairman of the Dedication Activities; **Dr. Henry W. Meyerding,** First Vice President, International College of Surgeons; **Dr. Arnold Jackson,** President, United States Section; **Dr. Max Thorek,** Founder of the College; **Dr. Karl A. Meyer,** Medical Superintendent of Cook County Institutions, and members of the Consular Corps. These men all paid tribute to the ideals of the College and to the Surgeons Hall of Fame so well illustrated by the statue being dedicated.

Dr. George Lull. Dr. Morris Fishbein at the microphone.

After the dedication exercises, an escorted tour of the Hall of Fame and the Museum of Surgical Science was offered



At dedication reception: Dr. Ernest Irons, Dr. G. Henry Mundt and Mrs. Louis Plzak (pouring).

to those present, followed by an informal reception in the College Home. Among those present, in addition to the speakers of the day, were **Claude J. Hunt,** M.D., F.A.C.S., F.I.C.S., of St. Louis, Missouri; **V. T. DeVault,** M.D., F.A.C.S., F.I.C.S., of Washington, D. C.; **Ulysses G. Dailey,** M.D., F.A.C.S., F.I.C.S., of Chicago, Illinois; **Dan Mellen,** M.D., F.A.C.S., F.I.C.S., President of the New York State Medical Society, Rome, New York; **Ella M. Salmonsen,** Chief of the Medical Department of John Crerar Library, Chicago, Illinois; **Mrs. Walter C. Burket,** President of the Woman's Auxiliary; **Louis F. Plzak,** M.D., F.A.C.S., F.I.C.S., and **Mrs. Plzak,** Woman's Auxiliary, of Chicago, Illinois.

Dr. Fishbein and his committee did a remarkable piece of work in organizing and arranging the ceremony of dedication, and they were delighted with the large group who attended the service and the reception. Those present expressed their pleasure at the smoothness and quality of the meeting and at the air of friendliness that is always so prevalent at the affairs of the College.

LA PRESSE MEDICALE

La Grand Journal Français de Chirurgie et de Medicine parait chaque semaine, et donne toutes les informations scientifiques et professionelles

ABONNEMENT

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LA PRESSE MEDICALE, Masson et Cie, éditeurs

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President's Page

The preamble of the constitution of the International College of Surgeons states that this organization is founded to create a common bond among the surgeons of all nations and to promote the highest standards in surgery throughout the world without regard to nationality, creed or color, and is dedicated to the principle stated by Pasteur, "Science belongs to no country, because knowledge is the patrimony of humanity, the torch which enlightens the world."

To illustrate this theme, let us take a plane as we do each year, and fly across the Atlantic to Paris. There, in 1951, a group of us, including Dr. Henry Meyerding, Dr. Max Thorek, Dr. Moses Behrend, the late Dr. Elmer Henderson, myself and others, met a group of splendid French surgeons and then established the French Section of the College. Dr. Raymond Darget, an outstanding urologic surgeon, was elected President of the group, and Prof. Lucien Leger, a brilliant Parisian surgeon, was elected Secretary.

The following year, over two hundred of us from the States went to Bordeaux to attend the first scientific session of the French Section. This meeting was held under the auspices of the University of Bordeaux Medical School, one of the oldest in France. Prof. George Portmann, Dean of the University and an enthusiastic member, was our host.

In 1952 a group of our officers and members went to Amsterdam to meet a number of distinguished Dutch surgeons and help them create a Section. Dr. George Chapchal, a splendid surgeon, was elected President. During the same year, many hundreds of members of the College from all over the world went by plane, ship, train and car to the Congress at Madrid. There, as guests of the Spanish government, we were received in the magnificent, newly built University Medical School by the President of Spain, as well as by Dr.

Dr. Arnold S. Jackson, F.A.C.S., F.I.C.S.

Alfonso de la Fuente, Dr. Soler-Roig and other leaders of the surgical profession. We were entertained royally. In Barcelona our genial host, Dr. Soler-Roig, conducted illuminating surgical clinics at the famous hospital San Pablo, built in the year 1401, ninety years before Columbus discovered America.

After this meeting we flew to Vienna, the birthplace of modern surgery. It was indeed thrilling to meet with our Austrian section in the world-famous Allgemeines Krankenhaus and to be welcomed by Prof. Chiari, dean of the medical school, and those surgical giants, Professor Finsterer (Past President of the International College of Surgeons and Austrian Section), Schonbauer; and Mandl, the Austrian Secretary for the College. The following year many of us returned to this city to meet

with our Austrian friends, and the exchange of scientific knowledge was of great mutual benefit. Likewise, we enjoyed the opportunity of presenting scientific papers at their meetings. I was interested in making rounds with Dr. Paul Huber and seeing his hundred beds, all occupied by patients with goiter, and in seeing him operate. He is possessed of a charming personality and great surgical skill and has been a potent instrument in creating a common bond among the surgeons of all nations.

On two occasions, first in 1951 and again in 1953, it was my pleasure to meet with the outstanding surgeons of the Italian section. The first time we met in Florence and the last time in Rome. It was in Rome that I had some of my most thrilling experiences. I was privileged to represent the foreign delegates in a meeting in their capital, and on another occasion to preside at a meeting of the Italian Section of our College. In Italy, as in all the other cities and countries we had visited, we were graciously entertained, whether in the home of the eminent Prof. Raffaele Bastianelli, in the Royalty Club by the brilliant president of the Italian section, Prof. (Senator) Raffaele Paolucci, or at a party in which we were honored by the mayor of the city. Our visits to the Italian hospitals filled us all with admiration.

At these sessions we have greatly enjoyed the discussions on world and surgical problems. This spring we expect to go to Switzerland, where our distinguished colleague, Prof. Albert Jentzer, will be official host to the Twentieth Anniversary Congress, celebrating the foundation of the College by Dr. Max Thorek.

In free Germany I hope to renew acquaintance with several members of our College and make some new friends. In London, I expect to see Mr. Lawrence Abe and return a visit he paid me, and also to see the indefatigable Dr. James Brailsford and other friends.

Last spring some hundreds of us assembled at São Paulo for our biennial Congress. It would take a long time to tell about this great meeting, which was sponsored by the Brazilian Section. Several of our group were made Honorary Members of the Academy of Medicine, and again, in Lima, Honorary Memberships in the Peruvian Surgical Society were bestowed on some of our colleagues. In São Paulo our international President-Elect, Prof. Carlos Gama, together with Dr. Eurico Branco Ribeiro and many others made available to us every facility for the study of surgery there and provided many social functions in our honor.

It was not possible for me to accompany some of our officers and members on a recent trip around the world for the primary purpose of meeting with our sections or helping to create new ones in the Far East. Drs. Thorek, Behrend, Meyerding, Bacon and others must indeed have had a marvelous experience—one that would be difficult to duplicate except within the Fellowship of our College. Another of our members, a loyal and devoted Fellow, Dr. Jack de Vault of the U. S. State Department, is spreading the creed of our College throughout the world.

What about Canada and our own United States? Speaking from a personal point of view, I have traveled from Quebec to Winnipeg to Vancouver, and everywhere I have met people with a rapidly growing interest in the College and its ideals. To mention only a few among others, the enthusiastic Dr. Charles Burns, professor of surgery at the University of Winnipeg, and at Vancouver, two of Canada's most distinguished surgeons, Dr. Gordon Fahrni, Past President of the Canadian Medical Association, and Dr. Lyon Appleby, President of the Canadian section of the International College and past president of the American Goiter Association.

In this country I could name some thousands of fine surgeons, members of the College, whose cooperation we enjoy.

The College has grown more than was dreamed of in its early days. In the United States Section alone there have been men who literally gave their lives to establish the ideals and purposes of the College.

Pen Portraits of Distinguished Fellows

of the

International College of Surgeons

ADALBERTO PAZZINI, F.I.C.S. (Hon.)

Prof. Adalberto Pazzini was born in Rome on February 23, 1898. He was graduated with honors from the University of that city in 1922, and in 1931 became an Instructor in the History of Medicine at his alma mater, where, in 1935, he founded the Academy of History of the Sanitary Arts, transforming it from an old Institute of the same name and obtaining official status for it by royal decree. In 1936, having conducted a number of regular courses of study, he was honored with the post of Professor of the History of Medicine at the University. Later he established there the first University Institute in the field, and by personal donation of books and objects of permanent interest added a documentary museum and the nucleus of the Library. In 1944 he founded the Center for the History of Science and Technology, the object of which was to link the historical developments of all branches of science, as well as the annual publication *Pages in the History of Science and Technology*. In 1948 he founded the first School for Improvement in the History of Medicine, and in 1949 the periodical *Humana Studia*, which is also the official Bulletin of the Institute he directs.

The year 1949 also marked Prof. Pazzini's successful efforts to arrange construction of a new building to house the Institute, which had greatly expanded. The cornerstone for the new Institute, now completed, was laid in 1953. In addition to the Museum, which now contains several thousand objects of value, the new building houses a bibliographic documentary file enriched by two million additional "slips,"

Prof. Dr. Adalberto Pazzini, F.I.C.S.

arranged, classified and catalogued by Prof. Pazzini himself.

Prof. Pazzini lectured at the First World Congress for University Instruction in the History of Medicine, London, 1953. He organized and presided over the Fourteenth International Congress of the History of Medicine in 1954. He conducts regular courses in medical history at the Pontifical Gregorian University in Rome and at the University for Foreigners at

Perugia. He is the author of some four hundred publications, including *Medical Thought Through the Centuries*, a manual for students; a volume on the medical Saints (Rome, 1937) and *The History of Medical Instruction in Rome* (Bologna, 1935). Recently he discovered, in the Laurentian Library of Florence, twelve volumes of Morgagni, containing a work hitherto unknown (*Institutions of Medical Theory*). He is a member of more than twenty learned academies and societies, both in Italy and in other countries. He is Honorary President of the Italian Society of History of the Medical and Natural Sciences, Vice-President of the Class of Medical Sciences in the World Academy of Professionals and Artists and President of the Center of History of Science and Technology.

From the foregoing account, it is more than evident that Prof. Pazzini's energy and versatility are prodigious. One must know him, however, to realize the remarkable fusion of his great powers with his unassuming yet impressive personality. His fine services to the International College of Surgeons have placed him permanently among the Fellows who represent the College at its best and highest.

SPECIAL COURSE IN UROLOGY

Professor Dr. Raymond Darget, President of the Section on Urology of the International College of Surgeons, has begun a series of international réunions of urologists in Bordeaux, France, that will continue during the winter half-year. The first meeting, attended by **Drs. Bernard Fey,** F.I.C.S., of Paris, France, and **Alfonso de la Peña,** F.I.C.S., of Madrid, Spain, was very successful.

Professor Darget will also present a special course in Urology at the Hôpital du Tondu, Bordeaux, France, from June 6th to June 10th, following the European Congress of the Collège International des Chirurgiens in Geneva, Switzerland. This course will be conducted in two sections. Section 1 will cover the treatment of malignant tumors of the bladder including radium therapy and considering palliative treatments such as denervation of the bladder and uretero intestinal anastomosis. Section 2 will be centered around the treatment of malignant tumors of the prostate, discussing radium therapy and perineal and ischio rectal implantation of radium needles.

The course will include operations, cadaver work, lectures and the presentation of patients suffering from the aforementioned malignant neoplasms.

The number of participants admitted to the course is strictly limited, so all doctors interested are urged to write for additional information to the Collège International des Chirurgiens, 17, Rue Castéja, Bordeaux, France, as soon as possible.

Twentieth Anniversary Congress of the International College of Surgeons in Geneva, Switzerland

Prof. Dr. Albert Jentzer, F.I.C.S., Director and Head of the Department of Surgery of the University of Geneva and President of the Twentieth Congress of the International College of Surgeons, which will be held in Geneva, Switzerland, from May 23 to 26, 1955, has announced the arrangements made for scientific lectures and entertainment during the Congress period.

In his letter of welcome to the surgeons planning to attend this anniversary meeting, Dr. Jentzer said, "The members of the International College of Surgeons will have once again the opportunity of meeting one another in order to work together, presenting and discussing the results of their scientific researches. The evaluation of such experiences will result in an augmented progress of the art and science of surgery in general.

"The forum of the International College of Surgeons is open to all, members or non-members, who devote themselves to the advancement of surgery."

The scientific lectures will be delivered in the *Salle du Conseil Général,* 24, rue Général-Dufour, Genève. Sessions will begin punctually at the time indicated in the program of the Congress. No alteration will be made to the time table of reports and communications. In the interest of everyone, every effort will be made so that the program will be carried out with exactitude. Speakers missing will be replaced by out-of-program speakers, in order to avoid any confusion in the time table, and each speaker will be kept strictly to the time allotted to him, an automatic stop system being installed. The official languages of the Congress will be *English, French, German, Italian* and *Spanish.* There will be *simultaneous interpretation of the official languages into English and French.* While the program as it now stands is still only tentative, a final program will be given to each participant on arrival in Geneva.

The reports and communications already announced, listed in alphabetical order, are as follows:

ALLEMAGNE

Prof. C. Alken, M.D., Homburg-Saar:
Erfahrungen mit der Harnleiterplastik nach Kuss-Boari

Dr. H. Bartel, Hamburg:
Operationen am blutleeren Herzen

Prof. K. Boshamer, M.D., Wuppertal-Barmen:
Neue Armprothesen (mit kurzem Film)

Prof. G. Domagk, M.D., Wuppertal-Barmen:
Prix Nobel

Prof. C. Habler, M.D., Hanover:
Moderne Betäubungsmethoden und Gallenblasenchirurgie

Dr. K. Horatz, Hamburg:
Narkose bei Operationen am blutleeren Herzen

Dr. W. Kny, Hamburg:
Bronchialadenom

Dr. E. Schmid, Stuttgart
Zur Behandlung und Prophylaxe der sekundären Deformitäten nach Lippen-, Kiefer- und Gaumenspaltenoperation

Prof. R. Zenker, M.D., Marburg/Lahn:
Zur Wahl des Zugangsweges zur Perikardektomie

ANGLETERRE

Mr. J. Brailsford, M.D., Birmingham:
A Critical Survey of the Uses and Abuses of Radiology in Surgery

Mr. F. A. Henley, M.D., London:
Gastric Surgery

Mr. H. Ridley, M.D., London:
The Results of the Intraocular Acrylic Lens Operation

Salle du Conseil Général, Genève.

ARGENTINE

Prof. J. Taiana, M.D., Buenos Aires

AUTRICHE

Prof. H. Brücke, M.D., Mürzzuschlag:
Die osteoplastische Abmeisselung des Beckenkammes zum Verschluss grösserer Bauchlücken im Unterbauch

Prof. H. Finsterer, M.D., Wien:
Über die Behandlung der Cholangitis mit oder ohne gleichzeitigen Choledochussteinen und der Papillenstenose mit der Choledocho-Duedonostomie

Prof. P. Huber, M.D., Wien:
Bericht über 12.000 Strumektomien

Primarius H. Kopf, M.D., Linz-Donau:
Recidivstruma

Prof. F. Mandl, M.D., Wien:
Sympatikus Chirurgie

Prof. L. Schönbauer, M.D., Wien:
Karzinom und Vererbung mit besonderer Berücksichtigung der Zwillinge

BELGIQUE

Dr. L. Lambert, Liège:
Surrénalectomie dans l'hypertension paroxystique

Dr. P. Nys, Bruxelles:
L'Emploi du Polystan dans la cure de la hernie post-traumatique du poumon

CEYLAN

Dr. M. Paul, Colombo:
Diversions of the Urinary Stream resulting from Trauma or Surgical Operation

Dr. A. Paul, Colombo:
Giant Cysts of the Lung

COLOMBIE

Prof. A. Plaja, M.D., Bogota:
Thyroid Surgery: Management of Complications

DANEMARK

Dr. J. Hertz, Copenhague

EGYPTE

Prof. J. Bitschai, M.D., Alexandrie:
Vingt-cinq ans de résections endoscopiques de la prostate: Ses possibilités et ses limites

ESPAGNE

Prof. A. De la Fuente, M.D., Madrid:
Greffes vasculaires

Dr. J. Soler-Roig, Barcelone:
Troubles fonctionnels et cancer de l'oesophage

FINLANDE

Prof. K. E. Kallio, M.D., Helsinki:
A New Method of Arthroplasty

FRANCE

Prof. Agr. A. Ameline, M.D., Paris:
Notions récentes sur les métastases, ovariennes des épithéliomes digestifs (avec diapositifs)

Prof. Agr. P. Bertrand, M.D., Lyon

Prof. Agr. Bouvier, M.D., Reims

Dr. A. Chauvenet, Thouars:
Aspects de la pathologie de l'angle iléo-caecal

Prof. Agr. E. Chauvin, M.D., Marseille:
Prognostic éloigné et indications de la cystectomie totale

Prof. Agr. J. Creyssel, M.D., Lyon:
La prophylaxie et le traitement du choc traumatique à la lumière des récentes acquisitions thérapeutiques

Prof. R. Darget, M.D., Bordeaux:
Le traitement radium-chirurgical du cancer de la prostate

Prof. M. Faure, M.D., Limoges

Prof. Goinard, M.D., Alger

Auditorium of the Salle du Conseil Général.

Prof. Agr. B. Guihéneuc, M.D., Rennes:
Pronostic du cancer de l'ampoule rectale et déductions thérapeutiques
Dr. M. Iselin, Paris:
La notion d'urgence différée dans la chirurgie actuelle
Dr. H. Laborit, Paris
Prof. Agr. F. Léger, M.D., Paris:
Pancréatographie
Dr. F. Masmonteil, Paris:
Ostéosynthèse par cercle de Parham
Prof. Agr. Ch. Mirallié, M.D., Nantes:
Le traitement des fractures sous-trochantériennes du fémur par la broche de Küntscher
Dr. Nodelec, Nantes
Dr. J. Petit, Sceaux:
La prostatectomie à la sonde de Delinotte. Rapport de 50 cas
Prof. G. Portmann, M.D., Bordeaux:
La chirurgie conservatrice dans le traitement du cancer du larynx
Prof. Agr. Pouyanne, Bordeaux
Dr. A. Ricard, Lyon
Prof. Agr. Sabadini, M.D., Alger
Prof. Agr. M. Sourdille, M.D., Paris:
Chirurgie de l'otosclérose
Prof. R. de Vernejoul, M.D., Marseille
Prof. Agr. J. Villar, M.D., Bordeaux

HOLLANDE

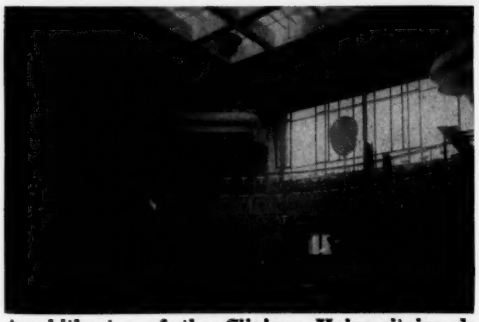
Dr. J. Glazenburg, Hilversum:
Portocavale Shunt bei portaler Hypertension Ueber einen besonderen Fall von Oesophagusplastik

ISRAEL

Prof. G. Wolfsohn, M.D., Jérusalem:
Erfahrungen mit einem Fascien-Faden vom Rind

ITALIE

Prof. G. Bendandi, M.D., Rome:
La fièvre des splénectomisés



Amphitheater of the Clinique Universitaire de Chirurgie, Geneva.

Prof. A. Dogliotti, M.D., Turin:
La spléno-portographie suivant la méthod Abeatici e Campi (expéience personnelle)
Discussion: Prof. Afr. F. Léger, Paris
Prof. R. Paolucci, M.D., Rome:
Tumeurs mésenchymateuses du poumon
Prof. P. Valdoni, M.D., Rome

LUXEMBOURG

Dr. Fr. d'Haurt, Luxembourg

PÉROU

Prof. F. Graña, M.D., Lima

RÉPUBLIQUE DE PANAMA

Dr. G. Engler, Almirante:
Technical Aspects of Surgery in the Tropics

TURQUIE

Prof. F. Arel, M.D., Istanbul:
La chirurgie des kystes hydatiques du poumon
Dr. F. Berkay, Istanbul:
I. Echinococcus of the Brain; II: Enormous Brain Tumors
Prof. D. Manizade, M.D., Istanbul:
The Value of the Sign of "Percussion Pain" in Acute Abdomen

VENEZULEA

Prof. A. Borjas, M.D., Caracas

UNITED STATES OF AMERICA

Dr. H. Bacon, Philadelphia, Pennsylvania:
Surgical Treatment of Cancer of Rectum by Abdominoperineal Proctosigmoidectomy without Colostomy and with Preservation of Anal Sphincters
Dr. M. Behrend, Philadelphia, Pennsylvania:
The Evolution of Gallbladder Surgery
Dr. H. F. Berg, Louisville, Kentucky
Dr. E. Berman, Baltimore, Maryland:
Hibernation in Anesthesia
Dr. L. Brodny, Boston, Massachusetts:
Epididymography, Seminal Vesiculography and Testicular Angiography
Dr. E. Compere, Chicago, Illinois:
Treatment of Supracondylar Fractures of the Femur
Dr. U. G. Dailey, Chicago, Illinois:
Present Status of the Treatment of Peptic Ulcer
Dr. V. C. De Vault, Washington, D. C.
Dr. M. Fishbein, Chicago, Illinois:
The History of Medical Organizations
Dr. M. Friedell, Chicago, Illinois:
The Use of Radio-Active Iodine (I-131) in the Surgical Management of Goiter

Dr. R. Gutierrez, New York City, New York
Dr. C. Guy, Chicago, Illinois:
Tantalum Mesh in Hernia Repair (with Moire)
Dr. C. Heifetz, St. Louis, Missouri:
Wound Healing Without Dressing
Dr. J. Howser, Oak Park, Illinois:
Diagnosis of Colon Bleeding
Dr. A. Jackson, Madison, Wisconsin:
Hyperthyroidism
Dr. B. Levant, Pittsburgh, Pennsylvania
Dr. F. Machon, Tarrytown, New York:
Annular Pancreas
Dr. R. W. McNealy, Chicago, Illinois:
Parotid Gland Tumors
Dr. K. Meyer, Chicago, Illinois:
Implications in the Treatment of Bleeding Peptic Ulcers, Correlations with Anatomical Studies
Dr. H. Meyerding, Rochester, Minnesota:
Dupuytren's Contracture of Hands and Feet
Dr. A. D. Morani, Philadelphia, Pennsylvania:
Trypsin Therapy in Treatment of Chronic Surface Ulcers
Dr. N. Owens, New Orleans, Louisiana:
Management of Cancer of the Head and Neck
Dr. W. Rosen, New Orleans, Louisiana:
Eosinophilic Granuloma
Dr. M. Simon, Poughkeepsie, New York:
Safeguarding the Recurrent Nerve in Goiter Surgery
Dr. W. D. Sugg, Bradenton, Florida:
Some Phases of Geriatric Surgery
Dr. A. Strauss, Chicago, Illinois:
Clinical End Results of Carcinoma of Stomach and Colon in 35 Years (1915-1954); and the Development of a Relative Immunity Acquired in the Patients of this Series—Supplemented by Experimental Studies
Dr. J. Watts, Washington, D. C.:
Some Aspects of Neurosurgery or Psychosurgery
Dr. F. Wilkins, Whittier, California:
Pyloroplasty as a Drainage Procedure in the Vagotomized Patient: An Experience with more than 200 Cases

This program has been planned with a great deal of care to meet the desires and interests of all surgeons, specialists and general, and shows the intense thought and attention given to arrangements by Prof. Jentzer and his associates, **Dr. J. H. Oltramare** of Geneva and **Dr. A. Nicolet** of Berne. Registration has been carefully considered, in order to cause the least possible trouble to the surgeons and their guests.

A series of cards is being issued to cover all phases of the Congress. *Card A* includes the registration fee, the price of the badge, a certificate and a bound volume of the scientific papers being presented at the Congress. This card is reserved for the scientific program alone, and does not include the entertainment program which has also been planned for those attending. *Card A* is issued upon the payment of $20.00. *Card B* will cover most of the items of entertainment which have been arranged, including a concert, a surprise program, a cruise on the lake, and sight-

The Clinique Universitaire de Chirurgie, Geneva. *Left*, surgical wing; *right*, hospital building.

seeing in Geneva and the vicinity, but does not include the anniversary banquet. The fee for this card is $12.00. The banquet is covered by *Card C* and will cost $8.00. Since places available for the banquet are being limited, the organization committee regrets that it will be obliged to refuse applicants who register too late. *Card D,* costing $19.00, covers all expenses for an excursion to the Jungfraujoch. This includes transportation by special train via Geneva, Lausanne, Montreax, Brigue, Lötschberg, Interlaken and Petite Scheidegg to Jungfrau, a 5 hour trip, with reception, luncheon and dinner at Jungfraujoch. The return trip of about 4 hours is by way of Bern. All members attending the Congress will need *Card A,* but the other items are optional.

In order to secure your cards in time, please send your reservation to the **Administrative Secretariat, 6-8, rue de la Confédération, Geneva,** and your remittance for the cards wanted to either the Secretariat by certified check in the name of the International College of Surgeons, accompanied by your registration card, or to: **Société de banque suisse (Swiss Bank Corporation), 2, rue de la Confédération, Geneva.** On arrival of the registration and check (or Bank notification of money received), a receipt will be sent you to be exchanged for the different congress cards on your arrival in Geneva.

In regard to travel and hotel arrangements please apply to the agents accredited by the College. Those attending the Congress from the United States and Canada should apply to the **International Travel Service, Inc., Palmer House, 119 S. State Street, Chicago 3, Illinois.** Surgeons and friends from other parts of the world are requested to apply to **Danzas Tourist Office, 5, rue du Mont-Blanc, Geneva, Switzerland.** Further information may be secured by writing these agencies.

Arrangements have been made for your comfort by the administrative secretary, **Mr. Edwin Fawer,** of Geneva. **Mme. Albert Jentzer** of Geneva; **Mme. R. Nissen** of Bâle; **Mme. J. H. Oltramare** of Geneva, and **Mme. A. Nicolet** of Berne have arranged for additional entertainment and hospitality for the wives and guests of the surgeons attending the Congress. Those who have worked so hard to make this an occasion of pure delight to all who go to Geneva for the Congress hope to see many of you there and to be able to greet vast audiences at this memorable meeting.

Geneva, noted for her special humanitarian endeavor and constant promotion of friendships between men and nations, was selected by Dr. Max Thorek, Secretary-General, for the foundation of the International College of Surgeons in 1935. It is eminently suitable that the same city should be the site of this Twentieth Anniversary Congress. Geneva's scenic beauty and her superb hotel facilities make it certain that all who attend this Congress will enjoy both fun and instruction.

European Study Tours Offered for Physicians

The German Educational Travel Association, a nonprofit organization, has arranged a series of study tours within Europe to coincide with important International Congresses being held this year. The tours create the basis for a successful exchange of experiences among physicians of many countries by means of lectures and discussions. They will also provide for visits to the technical establishments of Western Germany—clinics, plants producing new German pharmaceutical products and factories making medical apparatuses.

One of these all-expense tours, of special interest to members of the College, opens at Hamburg, Germany, on Thursday, May

12, 1955, with a dinner. Members will visit the Surgical Hospital of the University of Hamburg, meeting with **Prof. Dr. Hans Kastrup,** F.I.C.S. They will watch demonstrations of thoracic surgery, including operations for tuberculosis of the lungs. Lectures on potentiated narcosis by artificial hibernation, after effects of stomach operations and circular nailing of pertrochanteric fractures will be given. The next city visited will be Hanover, where they will visit the Orthopedics Clinic St. Anna Stift on May 14, meeting with **Priv. Lecturer Dr. Gardemin** for a round table discussion. On Sunday they will be in Bad Pyrmont for an inspection of the spa and the park, which is considered the finest in Germany.

Sunday afternoon they will go to Goettingen in order to visit the Surgical Hospital of the University on Monday morning, meet **Prof. Dr. Hellner,** and hear a lecture on tumors of the bones. In Marburg, on Tuesday, the members of the party will visit the Surgical Hospital of the University, where they will inspect the hospital, see demonstrations and meet **Prof. Dr. Rudolf Zenker,** F.I.C.S. Tuesday afternoon, on the way to Frankfurt/Main via Bad Homburg, they will have a short visit at the reconstructed Saalburg, the best example of an old Roman castle along the Limes, the former Roman defense wall. In Frankfurt/Main on Wednesday, a visit will be made to the pharmaceutical factories "Farbwerke Hoechat," formerly I. G. Farben. At Heidelberg there will be an opportunity for some sightseeing in addition to meeting **Prof. Dr. Bauer** at the Surgical Hospital of the University of Heidelberg and participating in a round table conference. On May 20 the group will be in Freiburg for a round table discussion with **Prof. Dr. Krauss** at the Surgical Hospital of the University of Freiburg.

Friday afternoon will be spent traveling through the famous Black Forest on the way to Basle, Switzerland, where a visit will be paid to the Surgical Hospital of the University. The group will be welcomed by **Prof. Dr. Rudolph Nissen,** President of the International College of Surgeons, and the members of the visiting party will participate in a round table discussion. After luncheon, members of the tour will proceed to Geneva, where the tour ends, in time to attend the Twentieth Anniversary Congress of the International College of Surgeons, which convenes in Geneva on May 22.

This tour will cost $270 per person. Additional information may be obtained by writing Secrétaire Général du Congrès M. E. Fawer, 6-8, rue de la Confédération, Genève.

BRONCHOESOPHAGOLOGY COURSE OFFERED

The next bronchoesophagology course to be given by the University of Illinois College of Medicine is scheduled for the period Oct. 24 to Nov. 5, 1955. The course is under the direction of **Dr. Paul H. Holinger,** F.A.C.S.

Interested registrants will please write directly to the Department of Otolaryngology, University of Illinois College of Medicine, 1853 West Polk Street, Chicago 12, Illinois.

United States and Canadian Sections

Haitian President Visits Hall of Fame

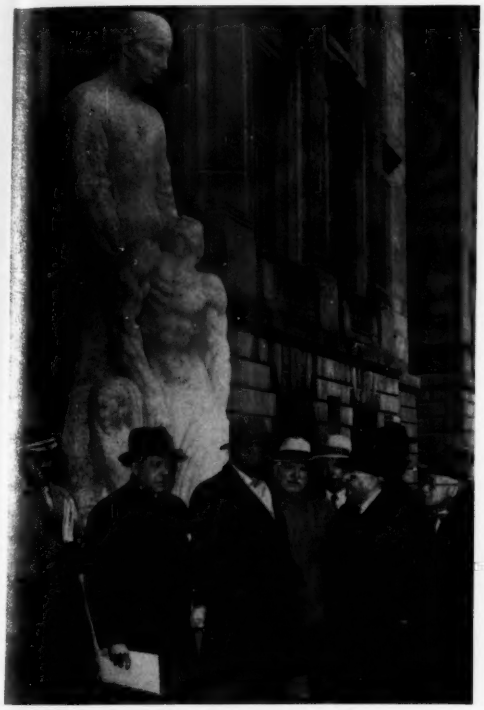
Early in February of this year the College was honored by a visit from His Excellency **M. Paul Eugene Magloire,** President of the Republic of Haiti, with the First Lady and their entourage, to the Hall of Fame of the International College of Surgeons. A reception in their honor was held at the Home of the College at 1516-24 Lake Shore Drive, Chicago. Among those present were **Dr. Max Thorek,** Founder of the College; **Dr. Horace E. Turner; Dr.** and **Mrs. Ulysses Grant Dailey; Dr. Kurt L. Eichelbaum; Dr. Walter Cleveland Burket** and **Mrs. Burket,** and **Dr.** and **Mrs. Louis Plzak.**

M. le President was taken on a tour of both the College Home and the Hall of Fame and was most gracious in his expressions of interest, approval and congratulation. He was especially interested, of course, in the Haitian Room of the Hall of Fame and in a number of scientific items of interest recently arrived from Haiti and displayed there; but it was at once apparent that he had enthusiasm to spare for the achievements of countries other than his own.

Dr. André Crotti addressing His Excellency the President of Haiti during the latter's visit to the Hall of Fame.

The brief stay of the President and his

President of Haiti at reception on occasion of his visit to the Hall of Fame. *Left to right*—His Excellency President Magloire. *Seated*: Drs. André Crotti, Max Thorek and Ross T. McIntire. *Standing*: Dr. Horace Turner.



President of Haiti (*second from left*) on recent visit to the International Surgeons' Hall of Fame.

staff in Chicago was part of a tour made by His Excellency to salient centers of the United States, beginning, of course, in Washington, D. C. Those privileged to meet him and the charming **Mme. Magloire** enjoyed the occasion very much, wishing only that it might have been less brief.

It is encouraging, as it always is to the thoughtful, to note that more and more of the heads of state in countries all over the world are interesting themselves in scientific affairs; and not only that, but giving them their utmost support. International Congresses of the College have been sponsored repeatedly by the highest officials of several countries, who have not only sent special invitations to the Secretariat but have participated in entertaining the visiting surgeons and doing everything possible to make them welcome. M. Magloire's warm interest, therefore, in the College and what it stands for, though no surprise, was extremely pleasant. His departure, even after so short an acquaintance, was regretted by all.

Lovelace Clinic Sponsors Nuclear Medical Institute

The Lovelace Clinic Foundation of Albuquerque, New Mexico, headed by **Dr. William Randolph Lovelace**, F.A.C.S., F.I.C.S., Past President of the United States Section of the International College of Surgeons, is sponsoring the establishment of the first nuclear medical unit of its kind in the world, to be housed in a $1,000,000 building near the Clinic. Mr. John Jay Hopkins, head of General Dynamic Corporation, which is now engaged in building two atomic-powered submarines for the Government, stated that the project will be initiated through funds appropriated by the corporation to the Lovelace Foundation for Medical Education and Research. The building will be constructed by the Lovelace Foundation and other contributors.

Mr. Hopkins, who has long interested himself in the almost unlimited possibili-

Dr. Elmer Hess inspects Thetatron to be installed in new Nuclear Medical Center near the Lovelace Foundation for Medical Education and Research, Albuquerque, New Mexico.

Dr. William Randolph Lovelace (right) discusses new Institute of Nuclear Medicine and Biology with Dr. Elmer Hess, President-Elect of the American Medical Association.

ties of nuclear medicine and felt that it could attain its full usefulness only in the hands of private scientists, pointed out that until now all such work has been done in laboratories owned or sponsored by the Government and has thus occupied the status of a by-product of defense rather than that of an enterprise highly significant in its own right.

"It is expected," says the Albuquerque *Journal*, "that the Institute will be concerned with exploratory and applied medical research involving radioscopes, nuclear radiation and the development of electronic and nuclear instrumentation and equipment. Two unique functions of the Institute will be the establishment of a special reference library devoted to assembling the world literature on nuclear medicine and the periodical publication of a journal on nuclear medicine." Mr. Hopkins predicts that the Institute will eventually become an enormous institution, even one of international importance, through which scientists of all free nations can work together.

Albuquerque was chosen as the site of the new Institute not only because of its proximity to such vital nuclear bases as Los Alamos and Sandia Field but because the Lovelace Clinic already has a nuclear staff. We have seldom encountered a better event in support of the motto *"Semper paratis."* It is altogether fitting that the Lovelace Foundation, established in 1947 by Dr. William Randolph Lovelace, with his son, Dr. William Randolph Lovelace II, F.A.C.S., F.I.C.S. (who will head the Institute), and Dr. E. G. Lassetter, should be honored with this all-important trust. The avowed purposes of the Foundation are "the fostering of knowledge of the causes, prevention, relief and treatment of human disease and the promotion of public health." Its implicit purposes are still greater, since they embody the world-wide aspirations held by the International College of Surgeons. The College is honored by the honors paid to Drs. Lovelace and Lassetter and their aides and colleagues, and heartily welcomes this new evidence that another great step is being taken toward scientific enlightenment and human welfare.

Dr. Selye to Contribute to Academy Program

Presentation of a paper by **Dr. Hans Selye, F.I.C.S.** (Hon.), Director of the Institute of Experimental Medicine and Surgery, University of Montreal, and panel discussions on ulcerative colitis and on cancer of the lower intestines will highlight the International Academy's scientific sessions at the Hotel Plaza, New York City, on March 23, 25 and 26 and at the Jersey City Medical Center on March 24.

Operative clinics and a symposium on intestinal surgery and related conditions will be presented during the sessions at the Jersey City Medical Center. Dr. Selye's paper will include a resumé of recent work confirming his theory of a hormonal balance between pro- and anti-inflammatory corticoids, which he discussed in a paper before the 1953 meeting of the International Academy.

Since Dr. Selye will be unable to attend this year's Academy meeting, his paper will be read by **Dr. Alfred Cantor,** Secretary of the Academy, at the opening session of the meeting on March 23.

In accordance with its established practice, the Academy extends an invitation to all physicians to attend its sessions. The American Academy of General Practice will grant credits to its members attending the meeting.

Brazilian Section

Brazilian Section Looks Forward to New Home

The Brazilian Section has been working hard in a campaign among its members for the acquisition of a new home. The architects have finished the plans for the new building which will house the headquarters of the Brazilian Section, and will be a wonderful advance in the stimulation of the work of the Section and the fellowship already well established among its members.

Stimulated by a substantial grant from the central body of the College, many members have already added individual contributions in the minimum amount of Cr. $1.000,00 (one thousand cruzeiros). The officers of the Section report:

"Tendo a Secção Brasileira do Colégio Internacional de Cirurgiões adquirido a sua séde própria, assinando o contrato de compra de um andar em magestoso edifídio, localizado em ponto bem central, resolveu a Diretoria desta Secção fazer um apelo a todos os seus membros, no sentido de que cada um ofereça a pequena parcela de Cr. $1.000,00 (hum mil cruzeiros), como contribuição para a concretização dêste grandioso objetivo.

"Bastou correr a notícia da assinatura do contrato e do apelo que ora lançamos aos dignos membros da Secção Brasileira, para que varios colegas expontaneamente procurassem a Diretoria, fazendo prazeirosamente sua contribuição para a edificação de nossa séde própria.

"Anexamos algumas das cartas recebidas pela Secção Brasileira dos membros de diferentes Regionais:

"Janeiro 7, 1955

"Aos prezados companheiros do colégio, o Dirceu agradece os votos para o Ano-Novo, abraça e remete a sua contribuição para a 'nossa casa.'

Dr. J. Dirceu de Andrade,
Rue Benjamin Constant, 1060,
Juiz de Fóra, Minas.

"January 11, 1955

Prezado colega **Dr. Aloysio G. F. Camargo:**

"Saudações.

"Agradecendo-lhe, inicialmente, os cumprimentos pela passagem das Festas pela passagem das Festas que me foram enviados em nome da diretoria do Colégio Internacional de Cirurgiões, aproveito a oportunidade para enviar-lhe um cheque no valôr de Cr. $1.000,00 (hum mil cruzeiros), como minha pedrinha para a séde própria.

"Outrossim, louvo a diretoria pela feliz iniciativa e faço votos por que a ela não fuja um só dos seus associados.

"Sem outro motivo, subscrevo-me,
Do colega e amigo,
Dr. W. Pinheiro
Praça João Mendes, 64
São José dos Campos,
Estado de São Paulo.

São José do Rio Preto,
24 de janeiro, 1955

"Prezado colega Dr. Aloysio Camargo:

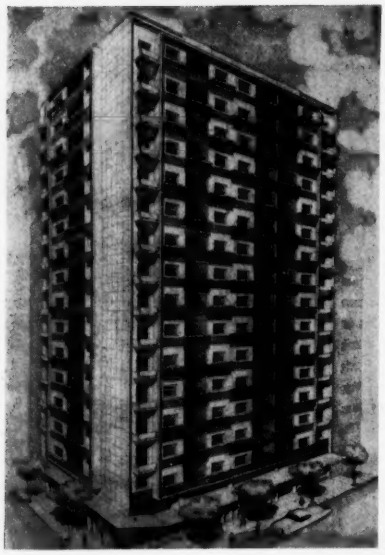
"Regressando de uma viagem de recreio, recebí sua prezada carta de 9 p.p., razão porque sóagora a venho responder, e também agradecer os votos de Bôas Festas nela contidos.

"É com prazer que, atendendo ao apelo da Secção Brasileira do Colégio Internacional de Cirurgiões, apresso-me em lhe enviar a importância solicitada para a concretização de tão necessário empreendimento.

"Ainda quero afiançar-lhe que estarei sempre às suas ordens com a nossa modesta colaboração para todos os empreendimentos dessa natureza. No cheque de mil cruzeiros, vão incluidos mais vinte cruzeiros para a remessa da carteira de identidade a que se refere o artigo 7° de sua carta, e com êles, a fotografia pedida.

"Com os votos para que o ano de 55 lhe seja de felicidade, subscrevo-me, o seu colega, amigo e admirador,

Dr. Sellmann Nazareth
Praça São José, 2863
São José do Rio Preto
Estado de São Paulo.

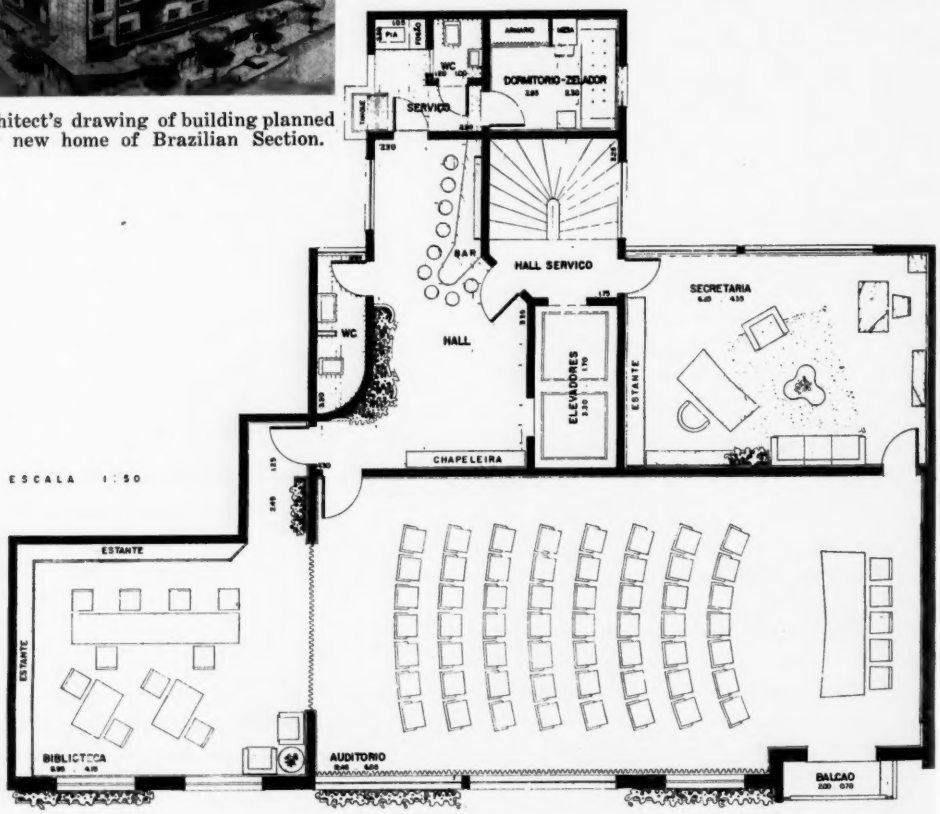


Architect's drawing of building planned for new home of Brazilian Section.

"Rio de Janeiro
7 de janeiro, 1955
"Exmo. Snr.
Dr. Aloysio G. F. Camargo (F.I.C.S.)
Secretário do C.I.C.
São Paulo
"Prezado colega:

"Em mãos a V. carta circular de 9 d dezembro, com várias novidades, imclusive o apelo para a contribuição da compra da séde própria do 'nosso' Colégio. Nunca fiz uma contribuição com tanto prazer e tanto satisfação, apesar de radicado no Rio. Junto à presente um cheque na importância de Cr. $1.000,00 (hum mil cruzeiros).

"Incluo também à presente, 2 fotografias 3 x 4, para a confecção da minha carteira



Plans for the new headquarters of the Brazilian Section.

de identidade, alem de Cr. $50,00 para as despesas e remessa.

"Gostaria também de saber si é possível que me seja remetido o certificado de participante do Congresso em Abril findo e que na ocasião deixei de fazer, bem como quais as despesas para o mesmo.

"Aproveito a oportunidade para desejar a todos os colegas da diretoria do C.I.C. um feliz e prospero Ano Novo,

mui cordialmente,

Dr. Carlos Henrique Mayr (F.I.C.S.)
Rua Lacerda Coutinho, 49
Rio de Janeiro

It is the hope of the Directors of the Brazilian Section that all members of the organization will contribute to the building fund for this new "Home" for the Section, so that all the members may feel that they are truly "at home" in this edifice so carefully planned for their use. Among those who have already contributed to this fund are:

The International College of Surgeons

Prof. Dr. F. E. Godoy Moreira S. Paulo	Cr. $5.000,00
Dr. Gideon de Oliveira S. Paulo	1.000,00
Dr. Pedro Falcão Ribeirão Preto	1.000,00
Dr. Aloysio G. F. Camargo S. Paulo	1.000,00
Dr. José Sobrinho Gonçalves Salvador	1.000,00
Dr. Sellmann Nazareth S. José Rio Preto	1.000,00
Prof. Dr. Henrique Mélega S. Paulo	1.000,00
Dr. Gedeão F. da Silveira Porto Alegre	1.000,00
Dr. José Soares Bilharinho Uberaba	1.000,00
Dr. Maurício Teichholz Petrópolis	1.000,00
Dr. Marcello José Figueiredo Lima Rio de Janeiro	1.000,00
Dr. Carlos Henrique Mayr Rio de Janeiro	1.000,00
Dr. Luiz Gonzaga da Silveira Fortaleza	1.000,00
Dr. Zacharias Pinheiro Caconde	1.000,00
Dr. José Penna Fernandes S. João da Bôa Vista	1.000,00
Dr. Antonio Castanheira de Carvalho Belo Horizonte	1.000,00
Dr. J. Dirceu de Andrade Juiz de Fóra	1.000,00
Dr. W. Pinheiro S. José dos Campos	1.000,00
Dr. Oscar Soares Azevedo Anápolis	1.000,00
Dr. Eurico Branco Ribeiro S. Paulo	1.000,00
Dr. Geraldo Vianna de Paula Belo Horizonte	1.000,00
Dr. Homero Vianna de Paula Belo Horizonte	1.000,00
Dr. Acácio Ribeiro Vallim Santos	1.000,00
Dr. Olímpio Barbanti Pirajuí	1.000,00
Dr. Marcos Merhy Rio de Janeiro	1.000,00

The Fellows of the International College of Surgeons are most interested in this project and sincerely wish the Brazilian Section *buena ventura!* Such plans are a sign of the health of the organization and the fruition of the hopes and dreams of its officers and members.

Courses on Obstetrics, Gynecology and Pediatrics Given in São Paulo

The São Paulo Regional Division of the Brazilian Section joined with the Legião Brasileira de Assistência in sponsoring courses on Obstetrics, Gynecology and Pediatrics at the Casa Maternal e da Infancia "Leonor Mendes de Barros," in São Paulo, from Jan. 17 to Feb. 17, 1955.

The courses were concerned with both the theoretical side of these studies and practical demonstrations. Among the lecturers were: **Dr. Domingos Delascio**, F.I.C.S., Director of the Casa Maternal e da Infancia; **Dr. Antonio Guariento**, F.I.C.S.; **Dr. Bernardo Blay**, F.I.C.S.; **Dr. Jorge José Coelho Tavares**, F.I.C.S.; **Dr. Duilio Crispim Farina**, F.I.C.S.; **Dr. Fuad Ferreira**, F.I.C.S.; **Dr. José Americo Soarres Baptista**, F.I.C.S., and **Dr. Luciano Endrizzi**, F.I.C.S., all of São Paulo.

The closing session was held on February 17 at 9 p.m. at the Casa Maternal e da Infancia. Dr. Domingos Delascio spoke

on *Intrauterine Death.* A number of government officials and Fellows of the Brazilian Section participated. Among these were **Dr. Eurico Branco Ribeiro,** President-elect of the Brazilian Section; **Dr. Aloysio Geraldo Ferreira de Camargo,** Secretary of the Section; **Dr. José Maria Cabello Campos,** President of the São Paulo Regional Division; **Mr. João Batista Monteiro,** President of the Legião Brasileira de Assistência State Commission, and **Dr. Augusto José Fernandes,** Chief of the Maternity and Child Division of the Legião Brasileira de Assistência.

Diplomas for the courses were awarded to 51 participants who attended the classes regularly. Their names follow:

Augusto José Fernandes
Alberto Gastrin
Arion Bueno Oliveira
Alvaro da Cunha Bastos
Antonio Refinetti
Antonio Gomes da Silva Jr.
Clovis Saverio de Lucca
Durval Fernando Tricta
Décio Aranha Pereira
Dalila Angulo
Diogenes Borges Mello
Edsel Maria Gallacci
Enéas Soares Pinheiro
Geraldo Palma Vieira
Joaquim C. Almeida Moura
Fernando Siqueira
Fernando Faria Pereira
Guaraciaba Dellape Jardim
Heládio José Martins
Hermenegildo Morbin Jr.
Icchok Dawid Mandelbaum
Irany Ferreira
José Soibelmann
Junia Marins da Silveira
João Ganme

Scene at the closing ceremonies of the courses on Obstetrics, Gynecology and Pediatrics. *Left to right*—Dr. José Maria Cabello Campos, President of the São Paulo Regional Division; Dr. Domingos Delascio, Director of the Casa Maternale da Infancia "Leonor Mendes de Barros"; Dr. Eurico Branco Ribeiro, President-elect of the Brazilian Section, and Dr. Aloysio Geraldo Ferreira de Camargo, Secretary of the Brazilian Section.

Hugo Beolchi Junior
José Roberto de Freitas Azevedo, F.I.C.S.
Jacob Schachnik
Jamil Maluf
Jorge Guilherme Schmidt
José Breda
José Pereira Rodrigues
José Joaquim de Paula Mathias
Luciano Endrizzi, F.I.C.S.
Odorino Breda Filho
Osiris Domingues
Pedro Jorge Abrahão
Pedro Antonio Mercadante
René Mendes de Oliveira
Rubens Angulo
Sonia Terezinha Ricci
Salomão Dzik
Vicencio de Rosso
Elias Soubihe Naufal
Cosme de Guarnieri Neto
Caetano Giordano
Vinicius Toledo Amaral
Gaspar J. Lopes
Duarte Malva Vicente
José Eurico Santos Abreu
Israel Alves dos Santos

Foreign Interns and Residents Available

Approved hospitals in the United States and Canada which have openings for interns and residents are requested to communicate with the Secretariat of the International College of Surgeons, 1516 Lake Shore Drive, Chicago 10, Illinois.

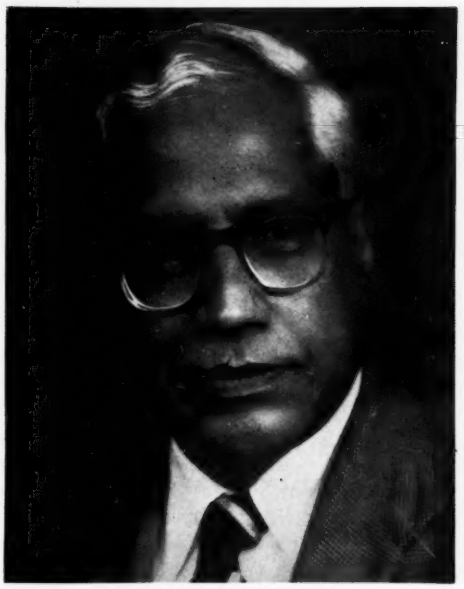
Indian Section

New Secretary Appointed for Indian Section

Dr. C. P. Viswanatha Menon, M.S., F.R.C.S. (Eng.), F.I.C.S., has recently been appointed Secretary for the Indian Section by **Col. K. G. Pandalai,** President of the Section.

Dr. Menon qualified from the Madras Medical College in April 1925. After taking a degree of Master of Surgery at Madras University in April, 1928, he was attached to the Madras Medical College, Madras, India, as Assistant Professor of Surgery and Tutor in Surgery from 1928 to 1935. In August of 1935 he went to England where he became a Fellow of the Royal College of Surgeons in November 1936. Since 1939 he has been Honorary Surgeon and Honorary Clinical Professor at the Government General Hospital in Madras.

He is the Founder Secretary of the Association of Surgeons of India and President of the Association of Surgeons of India for 1955. He has been the Honorary Editor of the Indian Journal of Surgery since 1941.



C. P. Viswanatha Menon, M.S., F.R.C.S. (Eng.), F.I.C.S.

Mexican Section

Eleventh National Assembly of Surgeons Meets in Mexico City

Prof. Dr. Manuel A. Manzanilla, F.I.C.S. (Hon.), read a paper on "Stress in Surgery" at the recent meeting of the Eleventh National Assembly of Surgeons held at the Juarez Hotel in Mexico City. Other papers on stress in surgery were presented by **Prof. Dr. José Garcia Noriega** and **Prof. Dr. Miguel Lavalle.** The presentation of the subject of the meeting, *Stress in Surgery,* was sponsored by the Mexican Academy of Surgery. **Prof. Dr. Francisco Fernandez del Castillo** presided at the Section on the History of Surgery.

Hometown to Hometown
An Odyssey Around the World

Elizabeth Bellas*

"An Odyssey Around the World"—familiar phrase used by the Airlines in outlining a circle tour. But what a tour we took! It encompassed the whole globe.

What adventures! What excitement! What thrilling entertainment until finally Hometown was reached!

It all arose in connection with the World Tour of the International College of Surgeons to open new chapters in various parts of the world. Great names in surgery from the United States formed the vanguard in this tremendous and ambitious undertaking; names such as **Max Thorek, Henry Meyerding, Harry Bacon, Moses Behrend** and **J. Harry Hayes.**

Dr. Max Thorek, Founder of the International College of Surgeons, showed his fine instrumental hand in attending to all the details of the meetings and finding time to have an audience with the Emperor of Japan. He was, however, even more appreciated by observers for his consistent devotion in calling his wife from every port to announce to her each time that he had arrived safely.

Dignified Dr. Meyerding gave way to shopper's delight in seeking appropriate gifts for his wife. It must be said in all truth that his taste was extremely discriminating.

Dr. and Mrs. Harry Bacon formed a handsome couple who enjoyed every thrill of the trip with *savoir faire.*

Dr. Mumey was a "specific" shopper. He was specializing in collecting earrings from all parts of the world for his wife. I had made him a tentative promise that I would assist him in adding to his collection from those parts that he was not going to visit—but this plan was completely foiled by my two daughters.

Each celebrity in turn, in an atmosphere of friendliness and relaxation, showed qualities far removed from those observed in the sternly assigned tasks of the operating room.

I was fortunate to receive an appointment to represent the Woman's Auxiliary of the International College of Surgeons and was in possession of an impressive document with Dr. Thorek's flowery signature attached. I found this document more useful than I had imagined, for it was on the strength of this that I received credit later on in Holland when I found myself in circumstances which urgently required replenishment of my funds.

Mrs. Joseph E. Bellas.

The tour first led from Los Angeles to Hawaii where the time was devoted to relaxation and to getting acquainted. Among the forms of entertainment arranged was a banquet expertly organized by the International Travel Service.

From Hawaii we flew to Japan with an intermediate stop on historic Wake Island. In Japan the emphasis was on the scientific sessions which culminated in the inauguration of a new Japanese Division of the College in Osaka. The entertainment and treatment accorded us by the Japanese Section was outstanding.

While the surgeons were in session in the morning, the ladies were invited by

*Member of Woman's Auxiliary, I.C.S.

Mrs. Nakayama and Mrs. Ono to take a sightseeing tour to the beautiful, ancient city of Nara, capital of Japan 1200 years ago, and to Kyoto. A tea was served in the Nara Hotel by our charming hostesses. The evening was completed by an inauguration banquet given by the Japanese Section of the College. The banquet, done in traditional Japanese fashion, had an air of delicate decorum with exquisite Geisha girls serving as personal hostesses and as entertainers—an atmosphere that was fantastically intriguing to the American guests. Such strange delicacies as shushi, kayayaki, sukiyaki and tempra were served us with warm saki. To say that the saki induced a glow is to put it mildly! Dancing followed, and I found myself dancing with a Japanese professor who informed me that it was the correct thing to do.

Our route then led to Hong Kong. I personally lingered in Japan and was then whisked into Hong Kong a few days later on the tail end of Typhoon Pamela. Typhoon or no typhoon, nothing could stop the mad scramble to visit the renowned tailor shops in Hong Kong where dresses and suits can be expertly completed in 24 hours. I kept continually running into the ladies and gentlemen of the group, all absorbed in the one consuming project—clothes! Some lost no time in sporting their newly tailored apparel the very next day.

The events in the bustling Peninsula Hotel were in no way abated by the typhoon. Inauguration of the Hong Kong Section was highlighted by a magnificent banquet which featured the fabulous foods so famous to Cantonese cooking. It was a great day for the epicures and will be long remembered.

Hong Kong is a place apart. It is as beautiful as the Isle of Capri and even more exotic than Cairo or Lisbon. It holds the world's most fabulous treasure trove which it spreads before the eyes of the tourist at give-away prices in a thousand bizarre stores.

After a hasty visit to Manila, I parted company with the group, as they were advancing too rapidly for my planned leisurely pace. Thereafter, although I was often one to three months behind the schedule of the members of the College, I encountered enthusiastic comments by members of the medical profession in the places in which the organization had held inauguration proceedings, from Bangkok to Istanbul. The breeze created by the International College of Surgeons was still in evidence on my later arrival.

My own itinerary after Manila led to Indonesia, with idyllic conditions in Bali; to mysterious Singapore; enchanting Bangkok, and through many parts of India and Kashmir where I lived the life of a queen in the romantic atmosphere of a luxurious houseboat. My road then led to Karachi, the hub of Moslem life in western Pakistan. I went to Baghdad to buy Aladdin's lamp—instead I was robbed by the Forty Thieves. Baghdad is the center of the Babylonian civilization which spread over the Fertile Crescent from Damascus to Beirut.

I leap-frogged to Cyprus and from there to Ankara and Istanbul, the latter holding its own as one of the most sparkling, picturesque and fantastic cities of the world!

This portion of the trip, and what lay ahead, was in familiar territory as I had visited these places on previous occasions. It was a thrill, nevertheless, to revisit the well known and lesser known spots in Greece, Italy, France, Germany, the Low Countries and parts of Scandinavia and England.

Suffice it to say, Magellan had nothing on me! I covered 44,000 miles by air—and I have a "Clipper Club" diploma from the Pan American Airways to prove it!

Woman's Auxiliary

Woman's Auxiliary Acts as Hostess for Cape Cod Meeting

Members of the Woman's Auxiliary, under the leadership of **Mrs. M. Leopold Brodny**, have taken an active part in planning the social hours, the banquets, the New England clambake, the square dancing, the sight seeing tour to Provincetown and the other items of entertainment planned for the enjoyment of the members and guests attending the three-day meeting of the Northeastern Section of the International College of Surgeons at Chatham Bars Inn, Chatham, Massachusetts (on Cape Cod) from July 1 to 4, 1955.

Mrs. Max L. Brodny.

Mrs. Brodny has announced the tentative program for the meeting as listed below:

Friday, July 1, 1955

Registration—
Chatham Bars Inn.....1:00-6:00 p.m.
Social Hour .....6:00-7:00 p.m.
Informal Dinner .....7:00-9:30 p.m.
Address: *The Purpose and Meaning of the International College of Surgeons*: Arnold S. Jackson, M.D., F.A.C.S., F.I.C.S., Madison, Wisconsin; President, United States Section, International College of Surgeons

New England Barn Dance—
Square Dancing ....9:30-12:00 midnight

Saturday, July 2, 1955

Scientific Session .....8:00-12:00 noon
Luncheon .....12:00- 2:00 p.m.
Scientific Session ..... 2:00- 5:00 p.m.
Woman's Auxiliary—Sight Seeing Tour to Provincetown ..... 2:00- 5:00 p.m.
Cocktail Hour (Courtesy of Desitin Company) ..... 6:00- 7:00 p.m.
Dinner .....7:00- 9:30 p.m.
Entertainment and Dancing .....9:30-12:00 midnight

Sunday, July 3, 1955

Morning—free
New England Clambake..1:00-3:00 p.m.
Cocktail Hour (Courtesy of Desitin Company) .....6:00- 7:00 p.m.
Formal Banquet .....7:00- 9:30 p.m.
Address: *The International Surgeons' Hall of Fame*: Max Thorek, M.D., F.I.C.S., F.B.C.S. (Hon.), F.C.P.S. (Hon.), F.R.S.M. (London), Chicago; Founder and Secretary General, International College of Surgeons
Fourth of July Jamboree .....9:30-12:00 midnight

Monday, July 4, 1955

Scientific Session ..... 9:00-12:00 noon
Farewell Luncheon .....12:00- 2:00 p.m.

These plans show the careful work done by Mrs. Brodny and her committee to make the meeting on Cape Cod one of unusual enjoyment to the surgeons attending and to their wives and guests. The members of the Auxiliary, looking backward to past meetings at which they became better acquainted with their fellow members, hope that the plans will encourage even larger attendance than usual.

Chatham Inn is a charming site for such a meeting during these holidays, which celebrate the birth of the United States. For the period of the meeting, the outstanding facilities of the Inn will be held for the exclusive use of the members and guests of the College. The Inn offers, in its immediate vicinity, every sport—including deep-sea fishing, golf and swimming. Within a very short distance are summer theatres, motion pictures, antique and gift shops, scenic beauty and historical shrines. For additional information and application blanks please write **Mrs. M. Leopold Brodny, 47 Arlington Road, Brookline, Massachusetts.**

Woman's Auxiliary Members from Ten States Attend Regional Meeting

Auxiliary members from ten states came, with their husbands, to the sectional meeting of the International College of Surgeons held at Houston, Texas, February 27, 28 and March 1, 1955.

Mrs. McKenzie Hallson, regional vice president, and her committee consisting of **Mrs. J. Reese Blundell, Mrs. Joseph E. Gancy, Mrs. T. R. Hannon, Mrs. S. Baron Hardy, Mrs. J. Wade Harris, Mrs. Allen McMurrey, Mrs. Michael K. O'Heeron** and **Mrs. J. B. Phillips,** had planned an interesting program for the entertainment of the women, and in addition engaged the Venetian Room, one of the loveliest of the Shamrock Hotel Parlors, as a hospitality center where refreshments were served from 8:30 a.m. to 4 p.m. every day.

A cocktail party, two sightseeing tours, a style show, and the banquet Monday evening created a spirit of friendliness and interest among surgeons and their wives. The friendly hospitality so traditional in Texas was felt by the visitors, who agreed that such meetings are of great value in creating the bond of understanding and cooperation among surgeons and their families which is so important to the eventual realization of the ideals of the College.

The auxiliary, which is as yet too young an organization to be other than a shadow of the College, is becoming more potent and active and it is hoped that it will soon grow into an important aide in the work of the organization and in the consummation of its aims. It is the hope of the Auxiliary, as it is of **Dr. Max Thorek,** Founder of the International College of Surgeons, that eventually every Fellow of the College will be represented in the Auxiliary by a wife, mother, sister or daughter, since they agree with the well known axiom that behind the success of every man lies a woman's love and encouragement.

The Houston meeting differed, in one respect at least, from the meeting held in Washington, D. C., two weeks previously—there was no weather to handicap the program. In place of the cold, blustery storms of Washington were the balmy breezes of Houston, with the flowers just coming into bloom and the air full of the scents of springtime. But the feeling of friendships solidified was that which members always carry away from these meetings—wherever they are held.

Official Auxiliary Pin

The Woman's Auxiliary of the International College of Surgeons has an official emblem which all members of the Auxiliary are entitled to wear. The officers of the College and of the Auxiliary look forward to a time when all women belonging to the organization will have these pins and wear them to the meetings they attend.

Further information about these pins may be secured from local or national officers of the Auxiliary. (Please see the February issue of the *Bulletin* for a list of these officials.)

The Medical Newsfront

Indian Association of the History of Medicine

Members of the International College of Surgeons have been asked for their cooperation and support of the Indian Association for the History of Medicine. The aims and objects of the Association, says **Dr. V. Sabba Reddy**, Secretary, are as follows:

"(1) To bring together, on a common platform, all persons interested in the History of Medicine. (2) To arrange for lectures, discussions and exhibitions, to spread the knowledge of the History of Medicine in general and of Indian Medicine, in particular. (3) To publish a Journal devoted to critical studies of original researches in Indian Medicine and lists of books dealing with History of Medicine in general and reviews of books dealing with the History of Medicine in India and complete bibliography of books and articles on the History of Indian Medicine. The journal will be run by an Editor, assisted by an Editorial Board. (4) To organize a Library of old Medical classics and books on the History of Medicine and Medical History Journals and obtain photostat copies of extracts from rare books and other facilities for the promotion of knowledge of History of Medicine and to conduct research in History of Medicine in India. (5) To help teachers and research workers with references and extracts on the Historical aspects of their special subjects relating to Medicine in India. (6) To establish contacts and correspondence with similar Medico-Historical Associations and Libraries of other countries and arrange for exchange of information and books and lecturers. . . . The Association will be grateful to you or to your institution for sending reports of any medico-historical activities or information relating to articles in local college magazines, local newspapers, historical exhibitions and special public or private collections of paintings, pictures, illustrating medical history medical manuscripts, old printed medical books and instruments and appliances and other relics of ancient and medieval medicine."

International Society for Urology Meets in Athens

The Tenth Congress of the International Society for Urology met in Athens, Greece, from April 10 to April 18, 1955, according to an announcement by Prof. Sp. Oeconomos, President of the Society.

Papers were read by physicians from Italy, Spain, Austria, Mexico, the United States, Portugal, Great Britain, Sweden, France, Switzerland, Brazil, Turkey and Greece. Three areas of research were discussed: the *Treatment of Cancer of the Prostate; Renal Angiography,* and *Post-Operative Treatment of Urinary Calculi.*

In addition to the scientific program offered, a tour was planned to include outstanding archeological sites and to allow a visit to many of the famous scenic and artistic treasures of Greece.

Cancer Fellowships and Residencies Offered

The M. D. Anderson Hospital and Tumor Institute, of the University of Texas, is offering a program of fellowships and residencies, under the auspices of the Postgraduate School of Medicine, to qualified applicants seeking training and research opportunities in oncology. Opportunity for participation in fundamental cancer research, together with a broad program of education in the Texas Medical Center, is offered in the following divisions:

Diagnostic Radiology
Therapeutic Radiology
Anatomical Pathology
Clinical Pathology
Experimental Pathology
Medicine
Experimental Medicine

Surgery
Experimental Surgery
Malignant Diseases (Rotating)
Anesthesiology
Biochemistry
Pediatrics
Gynecology
Physics
Neurological Surgery

For further information and application forms write to **Grant Taylor, M. D. Anderson Hospital and Tumor Institute, Texas Medical Center, Houston 25, Texas.**

Neurological Society Meets

A special symposium, "Hypothalamic—Hypophysial Interrelationships," was conducted recently at the third annual scientific meeting of the Houston Neurological Society, held at the Texas Medical Center on March 18 and 19. **Dr. Geoffry W. Harris,** of the University of London, England, and **Dr. Pierre Gloor,** of Montreal Neurological Institute, participated in the discussion.

Rheumatic Fever Prevention

A new motion picture, *Stop Rheumatic Fever,* revealing the important discovery in prevention of this disease by the control and treatment of its origin, streptococcus infection, has been released by the Public Health Service, U. S. Department of Health, Education, and Welfare, according to **Surgeon General Leonard A. Scheele.** It shows how parents, teachers, nurses, social workers, and physicians can prevent this source of disability, which frequently results in heart damage to children, adolescents and adults, and often causes death.

Promotion of this picture, produced by Transfilm, Inc., is part of the "Stop Rheumatic Fever" campaign sponsored by the National Heart Institute, the Public Health Service, and the American Heart Association. The film is well adapted for use with P.T.A. groups, luncheon clubs, community health meetings and the classroom. Running time is twelve minutes. This black-and-white, 16 mm. animated film, with music and narration, symbolizes rheumatic fever as a smoky flame which sometimes flares up, sometimes remains dormant.

Dr. Robert E. Schlueter Dies

Robert E. Schlueter, M.D., F.A.C.S., former associate professor of surgery at St. Louis University Medical School, died on February 12 at St. Louis, Missouri, at the age of 82.

"Medicine" Leading "Prestige" Occupation According to High School Journalists

A survey by "News Workshop," student publication of the New York University department of journalism, lists medicine as the leading "prestige" occupation in the opinion of New York high school editors.

The survey was conducted among 25 secondary school editors in the metropolitan New York area.

Most of the editors rated law, education, and banking above journalism on their social scale. Only one-fifth of the high school editors polled said they intend to follow journalism as a profession.

General Hospital of Mexico Commemorates Its Fiftieth Anniversary

The fifty years of service to scientific investigation, medical assistance and teaching accomplished in the General Hospital of Mexico was acclaimed on Feb. 5, 1955, at a special commemoration service presided over by the President of Mexico.

In Memoriam

HAROLD AARON RALPH SHANOR
M.D., F.A.C.S., F.I.C.S.

Dr. Harold A. R. Shanor was born on March 12, 1898 in Butler County, Pennsylvania, and graduated from the Butler High School. He took his B.A. degree at Washington and Jefferson College and, in 1926, received his degree of Doctor of Medicine from the University of Pittsburgh. After serving as intern at St. Francis Hospital, Pittsburgh, Pennsylvania, from 1926 to 1927, he did postgraduate work in association with Dr. C. C. Mechling and Dr. D. P. Greenlee, F.A.C.S., both of Pittsburgh. From 1932 to 1935 he was demonstrator in surgical anatomy at the University of Pittsburgh and then joined the active staff of Sewickley Valley Hospital in Sewickley, Pennsylvania, where he served until the time of his death on Nov. 5, 1954. In addition to his staff membership at Sewickley Valley Hospital, he was also a member of the active staff at Passavant Hospital, Pittsburgh, and a courtesy member of the staffs at St. Francis and Presbyterian Hospitals in Pittsburgh.

Dr. Shanor was a Fellow of the American College of Surgeons and a member of the American Medical Association, the Pennsylvania Medical Society, the Allegheny County Medical Society, the Pittsburgh Surgical Society and the Pittsburgh Academy of Medicine.

In 1950 he became an Associate of the International College of Surgeons and in 1951 was certified a Fellow of the College. The College mourns the loss of this energetic and active member and extends its sympathy to the members of his family and to his friends.

CLAIR PETER COSGROVE
M.D., A.I.C.S.

Clair Peter Cosgrove was born in Dillon, Montana in 1904. After his graduation from Beaver County High School in Dillon he attended the University of Utah, where he received his B.A. degree in 1926, majoring in biology and chemistry. Deciding upon a medical career, he entered Northwestern University, Evanston, Illinois, in 1927, and the degree of Doctor of Medicine was conferred upon him by that institution in 1930. After interning at the Los Angeles County Hospital from April 1930 to April 1931 he went on to graduate study in surgery, specializing in orthopedics and gynecology. In 1943 Dr. Cosgrove was attached to the Navy Medical Corps. From 1943 until his discharge from active duty in March 1946 he served with a surgical team aboard an attack transport, on ships in the South Pacific and in various naval hospitals both in the United States and overseas. He was affiliated with Methodist Hospital and Queen of Angels Hospital in Los Angeles, and was in the senior surgical service at Methodist Hospital from 1941 to 1948.

Dr. Cosgrove belonged to the Los Angeles County Medical Society, the California State Medical Society, the American Medical Association, the Surgical Section of the Los Angeles County Medical Association and the Hollywood Academy of Medicine.

In 1953 Dr. Cosgrove, who had been an Associate of the International College of Surgeons since Oct. 16, 1949, was notified of his admission to the examination for Fellowship in the College. It was a great disappointment to him and to the organization when a rheumatic heart condition made it impossible for him to risk the strain and stress of an examination at that time. Unfortunately Dr. Cosgrove's physical condition did not improve, and on June 29, 1954, he died in Los Angeles. The Fellows and Associates of the College sincerely regret the loss of this enthusiastic member and extend their sympathy to his family.

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Section II

Bulletin of Meetings—Announcements

National and International Activities

Vol. XXIII *May, 1955* No. 5

INTERNATIONAL COLLEGE OF SURGEONS

SCHEDULE OF MEETINGS

INTERNATIONAL—NATIONAL—REGIONAL

INTERNATIONAL

1955

May 23-26	Twentieth Anniversary Meeting	Geneva, Switzerland
Oct. 12-16	Third Congress, Brazilian Section	Belo Horizonte, Brazil
Oct. 22-23	Meeting of Austrian Section	Vienna, Austria
Oct. 22-26	Second Panamerican Congress International College of Surgeons	Mendoza, Argentina
Oct. 30	Second Congress, Japanese Section	Tokyo, Japan

NATIONAL: UNITED STATES AND CANADIAN SECTIONS

Sept. 12-15	Convention Hall	Philadelphia, Pennsylvania

REGIONAL

May 14	New Jersey Chapter New Jersey Medical Center	Jersey City, New Jersey
July 1-4	Eastern Division	Cape Cod, Massachusetts

1956

INTERNATIONAL

Nov. 19-24	Tenth Biennial International Congress	Buenos Aires, Argentina

At the Invitation and Under the Sponsorship of the Argentine Government

NATIONAL: UNITED STATES AND CANADIAN SECTIONS

Sept. 9-13	Palmer House	Chicago, Illinois

1957 NATIONAL: UNITED STATES AND CANADIAN SECTIONS

Sept. 8-12	Palmer House	Chicago, Illinois

1958 NATIONAL: UNITED STATES AND CANADIAN SECTIONS

Sept. 7-11		Atlantic City, New Jersey

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Section II

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National and International Activities

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Section II

Bulletin of Meetings—Announcements

National and International Activities

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Leonard Martin Thompson, M.D., A.I.C.S., Lena, Illinois

Pen Portraits of Distinguished Fellows

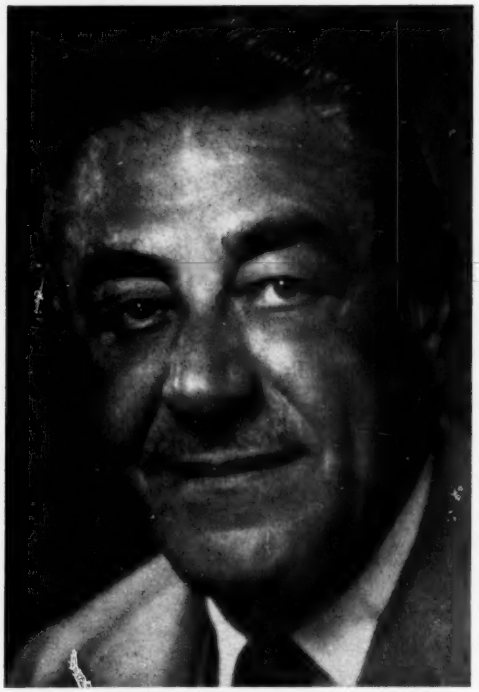
JOHN H. GARLOCK, M.D., F.A.C.S., F.I.C.S.

Dr. John H. Garlock was born in New York City on Aug. 29, 1896. After taking his elementary and high school work in New York City, he received the degree of Doctor of Medicine from Columbia University in 1919.

From 1924 to 1937 he was assistant attending surgeon at New York Hospital and, during the same years, was instructor in surgery at Cornell Medical College. In 1933 he was also appointed adjunct surgeon at the Mount Sinai Hospital in New York, and in 1937 became chief of its surgical service. Since 1937, he has held the position of clinical professor of surgery at Columbia University. He is also consulting surgeon at Barnert Memorial Hospital, Harlem Hospital, Mather Memorial Hospital, Northern Westchester Hospital and St. Mary's Hospital.

Dr. Garlock has contributed more than 100 items to the surgical literature. Many of these have been reports and papers on original research or new evaluations of factors already known but approached from a different angle. In 1927, for instance, he reported his experimental work on the repair processes of wounds in tendons and in tendon grafts. He originated an operation for the repair of intractable vesicovaginal fistulas in 1928, and made his results available to the surgical profession. He continued this line of research, and in 1929 recommended a subsequent procedure for rectovaginal fistula, an operative procedure based upon experimental observations for the cure of persistent bronchial fistulas. In 1930 he perfected an operation for reconstruction of the axilla in cases of burn contracture. He wrote a report in 1939 on the use of sulfanilamide in surgery of the colon and rectum, and in 1947 he announced a new procedure for bleeding esophageal varices.

His extensive additions to medical literature have run the gamut of surgery to include the thyroid gland, surgery of the hand, compound injuries of the extremities, thoracic surgery, plastic surgery, diseases of the parathyroid glands, and, in recent years, surgery of the gastrointestinal tract. His most important contribution during this period is related to the surgical treatment of carcinoma of the esophagus and the upper part of the stomach, his research for this study covering the years from 1938 to 1948. He has described original procedures in the treatment of these diseases which have resulted in their general adoption throughout the world. In 1951 he began an experimental study at Mount Sinai Hospital, in connection with the surgical service, to clarify some of the problems of electrolyte and



John H. Garlock, M.D., F.A.C.S., F.I.C.S.

water balance associated with many gastrointestinal diseases.

Dr. Garlock is associated with a number of professional organizations. He is a Diplomate of the American Boards of Surgery and Plastic Surgery and a Fellow of the American College of Surgeons.

It was a foregone conclusion that a man of his calibre should become a Fellow of the International College of Surgeons. On Sept. 10, 1955, he was made an Honorary Fellow of the College at the Nineteenth Congress in Chicago, Illinois. The enthusiasm and devotion he has always shown in his profession is equally evident in his interests and activities within the College. Recently, with his wife, he visited Japan, meeting with the Japanese Section and many of the Japanese Fellows of the International College of Surgeons, and giving lectures and demonstrations in hospitals and clinics throughout Japan.

Dr. Garlock's personal integrity and professional ability are well known but are no more outstanding than his personality, his character and his human qualities. His subtle sense of humor and his emotional maturity have made him a popular teacher, an outstanding lecturer and a good friend to those about him.

LA PRESSE MEDICALE

La Grand Journal Français de Chirurgie et de Medicine parait chaque semaine, et donne toutes les informations scientifiques et professionelles

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President's Page

Many times since assuming this office I have been asked by members of our College, either in person or by letter, if there was something they could do to help. Did you ever ask yourself that question? Think what tremendous strides the College would make if not just a few hundred members were trying to do something for the organization, but if every one of our more than five thousand members did some one thing to strengthen the College. What can you do?

Membership.—The College is definitely interested in a program to bring into its membership the highest type of surgeons, ethically and professionally, throughout the country. If every one of our members brought in just one outstanding surgeon at the September meeting, Philadelphia would have to annex Atlantic City for the induction of members. There are only about four months left before this meeting, and it requires nearly three months to process a candidate. Consequently, if you wish to propose a candidate this year, his application should be completed and filed early in June.

Officers.—There is a great deal that the forty-nine regents (two in California) can do for the College. You have all been requested to hold a meeting of your vice-regents and credentials committees at the earliest possible date. Such meetings not only serve to better the relationship among the members, but enable each state to perfect a method of processing applications within each state. In the great state of New York, under the indefatigable Dr. Horace Ayers, State Regent, meetings of the Credentials Committee are frequent and evaluations rigid. In states where the members are widely scattered this is not possible, but ways and means for meetings must be arranged.

In March, I met with the Florida group at the beautiful home of Regent Don Robertson of Orlando. An afternoon of work and boating was followed by an enjoyable party for fifty surgeons and their wives, given by the Robertsons.

Dr. Arnold S. Jackson, F.A.C.S., F.I.C.S.

Regent Lowrain McCrea of Philadelphia also met with his committee in March and developed some very valuable suggestions for the College. Regent Joseph de los Reyes writes that a very successful meeting of both the northern and southern California groups was held at Bakersfield. Several other Regents have written to say that meetings of their new credentials committees have been arranged.

The appointment of all Vice-Regents and members of the credentials committees is now complete; the total list numbers approximately five hundred members.

Meetings.—Dr. Harry Bacon has devoted unlimited time and effort in the interests of all the College. After his appointment as program chairman for the

1955 Philadelphia meeting, he went to work while the Chicago meeting was still in session and called a breakfast meeting of the various specialty chairmen. In a recent communication he advises that the program for the Annual Congress in September is complete; in fact, I had difficulty persuading him to find a place for a speaker of national renown.

Dr. Moses Behrend, equally loyal and hard-working, and the brilliant Dr. Charles Bailey and their subcommittees have perfected the general arrangements for the meeting, which promises to be the largest and most successful in the history of the International College of Surgeons.

What can you do to help these busy men? Plan to attend this meeting and make reservations for yourself and your family now in order to curtail last-minute confusion. Last year every specialty group had capacity audiences, and the same may be expected at this meeting.

There are two other meetings to think about. It is still not too late to plan to attend the great international meeting at Geneva under the leadership of Prof. Albert Jentzer. This meeting marks the twentieth anniversary of the College and, with its program of over two hundred internationally known speakers, promises to be a memorable occasion.

Finally, our energetic Regent from Massachusetts, Dr. M. Leopold Brodny, has announced an excellent program with delightful entertainment for the eastern division regional meeting of the Eastern Division on Cape Cod July 1-4. Seldom has such an opportunity been offered to enjoy a New England holiday, a vacation on the ocean, a fine meeting, and friendly companionship at the same time.

For Your College.—Your record, whether in surgery, in civic affairs of the community or in the hearts of your patients and colleagues, reflects on the College. If you constantly strive to improve your knowledge of surgery, by postgraduate study, by being a student of medical literature and by attending medical meetings, you bring credit not only to your family and yourself but to surgery as a great calling. Every surgeon who contributes a scientific paper either before a medical society or to the surgical literature, adds to his own knowledge as well as to the knowledge of others. No surgeon is too busy to take some part in the affairs of his community, whether it be city, state, or national — the Red Cross, the Boy Scouts, or the Community Chest. It would be a wonderful achievement if, before 1955 comes to a close, every one of the members of the United States Section of the International College of Surgeons could point with pride to something he had accomplished not just for himself but for his community and for his College.

For Your President.—The nicest thing that could happen to me would be to receive five thousand letters before 1956, telling me just what you have accomplished. There are potentialities of leadership in many yet unrecognized as "having what it takes." Sometimes we are too close to the forest to see the trees.

ARNOLD S. JACKSON, M.D.
President of the United States Section, International College of Surgeons

BRONCHOESOPHAGOLOGY COURSE OFFERED

The next bronchoesophagology course to be given by the University of Illinois College of Medicine is scheduled for the period Oct. 24 to Nov. 5, 1955. The course is under the direction of **Dr. Paul H. Holinger, F.A.C.S.**

Interested registrants will please write directly to the Department of Otolaryngology, University of Illinois College of Medicine, 1853 West Polk Street, Chicago 12, Illinois.

United States and Canadian Sections

Eastern Division Regional Meeting to Be Held on Cape Cod

Chatham Bars Inn at Chatham, Massachusetts, will be the site for the Regional Meeting of the Eastern Division, International College of Surgeons, July 1-4, 1955. Dr. **Leopold Brodny**, F.A.C.S., F.I.C.S., Regent of Massachusetts and General Chairman for the meeting, has announced the preliminary program of activities for this session. With the members of his committee, he has arranged a program of such varied interest that it will be valuable to all who attend, whether specialists or general surgeons. An invitation to be present has been extended to all members of the surgical and allied professions and to their friends. Wives and daughters of members and guests are also urged to come, and an interesting and entertaining program of nonscientific activities has been planned for their pleasure. (See P. 116, April *Bulletin*).

The tentative program of social and scientific events planned for this meeting is as follows:

FRIDAY EVENING, JULY 1, 1955

Social Hour.....6:00-7:00 p.m.
Informal Dinner.....7:00 p.m.
Presiding: **Dr. Harold R. Kurth**, F.A.C.S., F.I.C.S., Lawrence, Massachusetts
Address: *The Purpose and Meaning of the International College of Surgeons*, **Dr. Arnold S. Jackson**, F.A.C.S., F.I.C.S., Madison, Wisconsin; President, United States Section, International College of Surgeons

SATURDAY, JULY 2, 1955
Morning Session

General Chairman: **Dr. M. Leopold Brodny**, F.A.C.S., F.I.C.S., Assistant Professor in Urology, Tufts College Medical School, Boston, Massachusetts; Regent of Massachusetts, United States Section, International College of Surgeons

FRIDAY EVENING, JULY 1, 1955

Presiding: **Dr. James André Lamphier**, F.A.C.S., F.I.C.S., Assistant Professor in Gynecology, Medical College of Alabama, Birmingham, Alabama.
Secretary: **Dr. Benjamin Leavitt**, F.I.C.S., Fall River, Massachusetts.
Announcements.

SYMPOSIUM: GYNECOLOGY..10:00-12:30

Gynecology and Female Urology: Their Relationship in Diagnosis and Treatment .....10:00-10:20 a.m.
Dr. Gilbert F. Douglas, F.A.C.S., F.I.C.S., Associate Professor of Clinical Gynecology, Medical College of Alabama, Birmingham, Alabama.

Recent Trends in Vaginal Hysterectomy .....10:20-10:40 a.m.
Dr. Philip B. Keitlen, F.A.C.S., F.I.C.S., Associate Gynecologist, Wesson Memorial Hospital, Springfield, Massachusetts.

The Diagnosis and Management of Cancer of the Cervix in Situ...10:00-10:40 a.m.
Dr. S. Charles Kasdon, F.A.C.S., D.A.B., Assistant Professor of Obstetrics and Gynecology, Tufts College Medical School, Boston, Massachusetts.

PANEL DISCUSSION.....11:00-11:15 a.m.

SYMPOSIUM: UROLOGY

A New Surgical Technic for Treatment of Urinary Incontinence in the Female (Suburethral Myoplasty)...11:15-11:35 a.m.
Dr. Joseph Fischmann, F.A.C.S., F.I.C.S., Assistant Clinical Professor in Urology, Tufts College Medical School, Boston, Massachusetts.

Local Injection of Hydrocortisone as a New and Effective Treatment for Strictures of the Urethra and Meatus .....11:35-11:55 a.m.
Dr. Melvin K. Lyons, Senior Surgeon (Urology), Malden Hospital, Malden, Massachusetts; **Dr. Charles D. Bonner** and **Dr. Daniel Shields**, Boston, Massachusetts.

Testicular Angiography, Epididymography, and Vesiculography .....11:55-12:15 p.m.
Dr. Samuel A. Robins, D.A.B., F.A.C.R., Professor of Radiology, Tufts College Medical School, Boston, Massachusetts; **Dr. Hyman A. Hershman**, Boston, Massachusetts, and **Dr. Adolph A. DeNuccio**, D.A.B., F.A.C.S., Lawrence, Massachusetts.

PANEL DISCUSSION.....12:15-12:30 p.m.

LUNCHEON—Chatham Bars Inn
.....1:00-2:30 p.m.
Report: *The Purposes and Activities of the Woman's Auxiliary*

AFTERNOON SESSION

Presiding: **Dr. Jack Savran,** F.A.C.S., F.I.C.S., Providence, Rhode Island.

Secretary: **Dr. Nicandro F. DeCesare,** F.I.C.S., Lawrence, Massachusetts.

PLASTIC SURGERY

Indications and Use of Pedicle Grafts in Reconstructive Surgery..3:00-3:30 p.m.
Dr. Malvin F. White, D.M.D., Assistant Professor of Surgery, Tufts College Medical School; Instructor of Surgery, Harvard Medical School.

GASTROINTESTINAL SURGERY

Gastrointestinal Hemorrhage .....3:30-3:50 p.m.
Dr. Arnold S. Jackson, F.A.C.S., F.I.C.S., Jackson Clinic, Madison, Wisconsin; President, United States Section, International College of Surgeons.

Total Pancreatectomy With Follow-up .....3:50-4:10 p.m.
Dr. Clarence E. Moore, F.A.C.S., F.I.C.S., Chief of General and Thoracic Surgery, Harrisburg Hospital, Harrisburg, Pennsylvania.

Prevention and Correction of Injuries in Biliary Tract Surgery...4:10-4:30 p.m.
Dr. Philip Thorek, F.A.C.S., F.I.C.S., Clinical Associate Professor of Surgery, University of Illinois; Professor of Surgery, Cook County Graduate School of Medicine, Chicago, Illinois.

PANEL DISCUSSION.....4:30-4:45 p.m.

Male Fertility: Management of Cryptorchidism .....4:45-5:15 p.m.
Dr. Charles W. Charny, D.A.B., Associate Urologic Surgeon, Mt. Sinai Hospital, Philadelphia, Pennsylvania, and **Dr. William Wolgin,** Philadelphia, Pennsylvania.

PANEL DISCUSSION.....5:15-5:30 p.m.

Social Hour.....6:00-7:00 p.m.

Dinner Dance.....7:00-Midnight

SUNDAY, JULY 3, 1955

Morning—No Scheduled Events—Open

New England Clambake—
On the Beach.....1:00-3:00 p.m.

Social Hour—Chatham Bars Inn.....6:00-7:00 p.m.

Formal Banquet—Chatham Bars Inn.....7:00-10:00 p.m.

Presiding: **Dr. M. Leopold Brodny,** F.A.C.S., F.I.C.S., Assistant Professor in Urology, Tufts College Medical School, Boston, Massachusetts; Regent of Massachusetts.

Address: *The International Surgeons' Hall of Fame,* **Dr. Max Thorek,** F.I.C.S., F. B. C. S. (Hon.), F. P. C. S. (Hon.), F.R.S.M. (London). Chicago; Founder and Secretary General of the International College of Surgeons.

Fourth of July Jamboree.10:00 p.m.-Midnight

MONDAY, JULY 4, 1955

Morning Session

Presiding: **Dr. Martin Dobelle,** D.A.B., F.I.C.S., Pittsfield, Massachusetts.

Secretary: **Dr. James A. Gettings,** F.A.C.S., F.I.C.S., Pittsfield, Massachusetts.

ORTHOPEDIC SURGERY

Experience With the Intra-Articular Use of Hydrocortisone..10:00-10:20 a.m.
Dr. A. A. Savastano, D.A.B., F.I.C.S., Consulting Orthopedic Surgeon, University of Rhode Island, Kingston, Rhode Island.

The Conservative Management of Ruptured Intervertebral Discs...10:20-10:40 a.m.
Dr. Samuel S. Hanflig, D.A.B., Instructor of Orthopedic Surgery, Tufts College Medical School; Instructor in Surgery, Harvard Medical School, Boston, Massachusetts.

PANEL DISCUSSION.....10:40-10:50 a.m.

Presiding: **Dr. David Goldberg,** D.A.B., F.I.C.S., Springfield, Massachusetts.

Whiplash Injuries to the Cervical Spine and Associated Structures: Medical, Legal and Safety Aspects.10:50-11:20 a.m.
Dr. Harvey E. Billig, F.I.C.S., Medical Director, The Billig Clinic, Los Angeles, California.

PANEL DISCUSSION.....11:20-11:40 a.m.

Presiding: **Dr. Martin Dobelle,** D.A.B., F.I.C.S., Pittsfield, Massachusetts; **Dr. James D. Fisher,** D.A.B., F.A.C.S., Springfield, Massachusetts.

RECTAL SURGERY

Diagnosis and Treatment of Ano-Rectal Diseases .....11:40-12:10 p.m.
Dr. Gaspar Angelo, D.A.B., A.I.C.S., Surgeon in Proctology, Mt. Auburn

Hospital; Cambridge City Hospital, Cambridge, Massachusetts.

RADIOLOGY

Contact Radiation Therapy in the Treatment of Superficial Neoplasia.

.....12:10-12:30 p.m.

Dr. Bernard E. LeVine, D.A.B., Instructor in Radiology, Tufts College Medical School, Boston, Massachusetts.

Luncheon—Chatham Bars Inn.1:00-2:00 p.m.

Address: *Report on the Twentieth International Surgical Congress, Geneva, Switzerland.*

Dr. Ross T. McIntire, F.A.C.S., F.I.C.S. (Hon.), Chicago; Executive Director, International College of Surgeons.

Headquarters for the meeting will be the Chatham Bars Inn where all the scientific sessions will be held. The facilities of the Inn, one of the finest on Cape Cod, will be reserved for the exclusive use of the members of the College and their guests. The vicinity also affords the opportunity to golf, swim and do some deep sea fishing while neighboring towns offer everything of interest and amusement from antique bargaining to seeing the local movies. The scenic beauty of the locality is famous and the Inn is centered among numerous historical shrines. It is fitting that the College with its sturdy foundation of ideals and principles which are so similar to those of the great men who led this nation in its formative years should hold a meeting on July 4 in this region which was the cradle of the United States.

The registration fee for the meeting is $5.00. In accordance with custom, no charge will be made for residents, interns, nurses and the military. All surgeons, whether members of the College or not, may attend all scientific sessions by paying the same registration fee as the Fellows. For further information regarding registration please write **Dr. M. Leopold Brodny, 636 Beacon Street, Boston 15, Massachusetts.** For *reservations,* please address the **Beacon Travel Service, 145 Tremont Street, Boston 11, Massachusetts.**

Indiana Chapter Announces Meeting

The Indiana Chapter of the United States Section of the International College of Surgeons will hold its Annual Regent's Meeting at the Lincoln Hotel in Indianapolis on May 25, 1955. The following program has been scheduled for this meeting:

Registration .....2:30-3:00 p.m.

Presentation of Papers.....3:00-5:00 p.m.

Dr. C. Basil Fausset, F.A.C.S., F.I.C.S., Indianapolis, Indiana: *Whip-lash and Other Injuries of the Cervical Spine*

Dr. John A. Campbell, D.A.B., Indianapolis, Indiana: *Clinical Aspects of Radioactive Isotopes in Surgery*

Dr. Claude J. Hunt, F.A.C.S., F.I.C.S., Kansas City, Missouri: *The Gallbladder Problem*

Social Hour.....5:00-6:00 p.m.

Dinner .....6:30 p.m.

Address: **Dr. Alfred C. Kinsey,** Indiana University, Bloomington, Indiana: *Some Clinical Applications of Data on Sexual Physiology*

All surgeons and members of allied professions are invited to attend this meeting. Further details may be obtained by writing **Dr. Thomas C. Haller, F.A.C.S., F.I.C.S., 508 West Main Street, Crawfordsville, Indiana.**

Testimonial Dinner to Dr. Mellen

The New York State Surgical Division and the Woman's Auxiliary of the International College of Surgeons were hosts on Friday, March 25, at a dinner honoring **Dr. Dan Mellen,** F.A.C.S., F.I.C.S., President of the New York State Medical Society. The dinner, which came as the climax to a most rewarding scientific meeting, was given at the Statler Hotel, with **Dr. Louis Bauer,** former President of the American Medical Association and Secretary General of the World Medical Organization, as master of ceremonies. The invocation was pronounced by the **Rev. Dr. Otto Becker** of St. Paul's Evangelical Lutheran Church, Valley Stream, Long Island.

Among the guests of honor were **Dr. Max Thorek,** Founder and Secretary General of the College; **Dr. Ross T. McIntire,** former Surgeon General of the United States Navy and now Executive Director of the International College of Surgeons;

Dr. Arnold S. Jackson, President of the United States Section; **Dr. Alexander Brunschwig; Dr. Peter Murray; Dr. Walter P. Anderton; Dr. Alfred Goldsmith; Dr. Earl J. Halligan; Dr. Moses Behrend; Dr. Harry E. Bacon; Rear Admiral John J. Goller,** and the **Hon. Judge William B. Groat.**

Dr. Horace E. Ayers, Regent for New York, welcomed the guests on this delightful occasion, speaking with pride of the Division's growth in membership and expressing warm appreciation of the work of all who had contributed to its success. He expressed pleasure also in the recent appointment of Dr. McIntire as Executive Director of the College, and paid graceful tribute to **Mrs. Clifton L. Dance,** newly chosen President-Elect of the International Woman's Auxiliary, and to the Woman's Auxiliary itself.

Dr. Ayers' address was followed by one of the most sparkling and enjoyable dinners in College history. The occasion will be long remembered by those privileged to be in attendance.

Dr. de los Reyes Appointed to State Board of Medical Examiners

The Governor of California recently appointed **Dr. Joseph M. de los Reyes,** F.A.C.S., F.I.C.S., to the State Board of Medical Examiners. Dr. de los Reyes is Regent of the Southern California Division of the College.

Bakersfield Meeting a Huge Success

The recent regional meeting of the Southern California Division, held in Bakersfield in March, has gone on record as one of the most successful yet to take place at the regional level. Discussion was lively not only on the scientific topics selected for the main program but on almost every conceivable aspect of medicine and surgery, including medical education and medical history, and the need of adequate numbers of good hospitals throughout the country.

Among the notable Fellows of the College who were present were **Dr. J. M. de los Reyes,** Regent of Southern California; **Dr. Robert Foote,** Vice-Regent; **Dr. Ross T. McIntire,** Executive Director of the International College of Surgeons; **Dr. Lyon Appleby,** clinical professor of surgery at the University of British Columbia; **Dr. C. J. Barone,** professor of obstetrics at the University of Pittsburgh; **Dr. Malcolm R. Hill,** President of the Division; **Dr. Emmet A. Pearson,** Vice-President, and **Dr. Ross V. Parks,** Secretary-Treasurer.

Dr. Walter E. McPherson of Los Angeles, president and dean of the Loma Linda College of Medical Evangelists, spoke on medical education and practice. **Dr. Paul C. Elliott,** also of Los Angeles, president of the California State Hospital Association, was the guest speaker at Friday's luncheon. Dr. Appleby's address, "The Ubiquitous Trail of the Serpent," telling the story of the caduceus, symbol of medicine, was more than well received.

A note of special interest at this meeting was struck by its emphasis on the fact that the education of a medical man is continuous and can never be completed. This is one of the basic principles on which the International College of Surgeons is founded. The College considers itself first and foremost a teaching institution. That it has succeeded in indoctrinating its Fellows to this effect is never more evident than on such occasions as the meeting in Bakersfield, where the typical College interest in every phase of medicine and surgery was apparent throughout.

As always, the arrangements made in Bakersfield for the social side of the meeting were extremely well planned and thoroughly enjoyed. Those fortunate enough to be present will remember the meeting as both refreshing and significant.

Dr. Ayers Honored

Dr. Horace Ayers, F.I.C.S., Regent for the College for the State of New York, has been elected president of the Medical Arts Hospital of New York City.

*Constitution and By-Laws of the Woman's Auxiliary of the United States Section, International College of Surgeons**

Article I. Name

The name of this organization shall be the Woman's Auxiliary of the United States Section of the International College of Surgeons.

Article II. Objects

The objects of this organization shall be:

1. To assist the United States Section of the International College of Surgeons and its parent body in achieving its goal, and to individually and collectively render it such other services as may be requested by their authorized governing bodies;

2. To extend the aims of the United States Chapter of the International College of Surgeons and the parent body; aid in the promotion of surgical education, post-graduate training, scientific research and philanthropic endeavor.

Article III. Constituent Chapters

Constituent chapters of the Woman's Auxiliary of the United States Section of the International College of Surgeons may be established as approved by the Executive Council of the United States Section of the International College of Surgeons.

Article IV. Membership

Section 1. Membership in the Auxiliary shall be composed of active members and honorary members.

Section 2. All women interested in the activities of the International College of Surgeons are eligible for membership, subject to the approval of the Membership Committee and the Executive Council of the United States Section of the International College of Surgeons.

Section 3. Honorary membership may be conferred upon distinguished women, recommended by the Board of Directors of the Auxiliary, when approved by the Executive Council of the United States Section of the International College of Surgeons.

Section 4. Active members shall be entitled to one vote on each matter submitted to a vote of the members. Honorary members shall not be entitled to vote.

Section 5. Membership may be cancelled, if, in the opinion of the Executive Council of the United States Section of the International College of Surgeons, the conduct of any member is inimical to the interests of the organization.

Article V. The Governing Body; Board of Directors

Section 1. The activities and business of the Woman's Auxiliary shall be under the management and control of the Board of Directors, subject to the approval of the Executive Council of the United States Section.

Section 2. The Board of Directors shall meet at the time of the annual Assembly of the United States Section, and at such other times and places as the President or any three members of the Executive Committee shall direct, by and with the approval of the President of the United States Section of the International College of Surgeons.

Section 3. The Board of Directors shall consist of the general officers enumerated in Article VI, Section 1 of this Constitution, and the immediate Past President.

Section 4. The Board of Directors shall present an annual report of its activities to the membership, to be published in the Journal of the International College of Surgeons.

Section 5. Five members of the Board of Directors shall constitute a quorum.

Article VI. Officers

Section 1. The general officers of the Auxiliary shall be President, President-Elect, immediate Past President, First Vice President, Second and Third Vice Presidents, two Secretaries, Treasurer and Assistant Treasurer.

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*Under consideration for adoption by the Executive Council of the United States Section of the International College of Surgeons.

Argentine Section

Dr. Jorge A. Taiana Honored

The Mexican Academy of Surgery recently elected **Dr. Jorge A. Taiana,** Academic Foreign Correspondent for the Academy. Dr. Taiana is Director of the University of Buenos Aires, Vice President of the International College of Surgeons and President of the Argentine Section of the College.

Mexican Section

Second Mexican Congress of Obstetrics and Gynecology Announced

Dr. José Rábago, F.I.C.S., and **Dr. Antonio Sordo Noriega,** F.I.C.S., will serve as Honorary Vice-President and Executive Vice-President respectively at the Second Mexican Congress of Obstetrics and Gynecology which will be held June 5-11, 1955. His Excellency, **Sr. Adolfo Ruiz Cortines,** President of the Republic of Mexico, will act as Honorary President of the Congress. **Dr. Manuel Mateos Fournier** will be the Executive President.

The Mexican Congress of Obstetrics and Gynecology was organized by the Mexican Association of Obstetrics and Gynecology to provide a means for the exchange of information and technics among doctors in these special fields of surgery. The first Congress was well attended, and the material offered for discussion and consideration was of such value that the Association looks forward to larger attendance and a more varied program for this second meeting. Members of the Mexican Section of the College are gratified at the invitation to participate and feel honored by the prominent part played by Fellows from the College.

Constitution of Woman's Auxiliary (Cont.)

Section 2. The officers enumerated in Section 1 of this Article, the Regional Vice Presidents and Directors shall be appointed by the Executive Council of the United States Section and approved by the International Board of Trustees.

Section 3. The President-Elect upon the expiration of her term shall serve as President for a term of two years or until the qualification and appointment of her successor. In the absence or disability of the President, the President-Elect shall fill the vacancy, and in the absence or disability of the President-Elect, the First Vice-President shall fill the vacancy.

Section 4. If other offices become vacant, the Executive Committee shall appoint an active member of the Auxiliary to serve the unexpired portion of the term, subject to the approval of the Executive Council of the United States Section.

Section 5. The appointed officers and directors shall serve for two years to run concurrently with the term of officers of the Executive Council of the United States Section of the International College of Surgeons, or until the qualification and appointment of their successors.

Article VII. Executive Committee

Section 1. The Executive Committee shall consist of five members, four from the Board of Directors who shall be the President, the President-Elect, the Secretaries and the Treasurer, and one additional member to be appointed by the Executive Council of the United States Section International College of Surgeons.

Section 2. The Executive Committee shall perform such duties as the Board of Directors shall specify in carrying out the objects and purposes of the organization, and in the absence of the Board of Directors, shall act for and on behalf of the Board and exercise all the powers thereof.

Section 3. The members of the Executive Committee shall serve for two years, to run concurrently with the terms of officers of the Execu

(Continued on page 131)

French Section

Two Prominent Surgeons Added to French Section

It is with great pleasure that the French Section announces the admission to membership in the International College of Surgeons of two brilliant French surgeons at the May meeting of the Section.

Prof. Funck-Brentano

Dr. Bernard Lafay is the French Minister of Public Health and Population and the President of the Municipal Counsel of Paris. His outstanding work has brought him the admiration and respect of his colleagues. His addition to the roster of Fellows of the Section adds luster to this already exceptional group of surgeons.

Prof. Funck-Brentano, M.D., is an unusually fine teacher and a well-known figure in French medical circles. His personal integrity and his professional ability have combined to make him a natural choice for Fellowship.

Dr. Bernard Lafay, French Minister of Public Health and President of the Municipal Council of the City of Paris.

The College welcomes both of these men and invites them to take their places with the great surgeons who are working to achieve the aims and ideals upon which the International College of Surgeons was founded: the growth and dissemination of surgical knowledge; the increase of understanding; the betterment of mankind, and the stimulation of the rising sense of the brotherhood of man.

Constitution of Woman's Auxiliary (Cont.)

tive Council of the United States Section of the International College of Surgeons or until the qualification and appointment of their successors.

Article VIII. Amendments

The constitution and by-laws may be amended by the Board of Directors, or by a vote of two-thirds (⅔) of the Executive Committee, at any regular or special meeting, provided that the proposed amendment has been submitted in writing, mailed to each member of the Board not less than thirty (30) days prior to the date on which the proposed amendment is to be acted upon, and provided further that such amendment before becoming effective shall have been approved by the majority vote of the Executive Council of the United States Section of the International College of Surgeons.

Article IX. Dues

Section 1. Dues of active members shall be $10.00 per year, payable prior to March 15th. Honorary members shall pay no dues.

Section 2. The fiscal year shall begin on January 1st.

Article X. Disputes, Dissolution and Surpluses

Section 1. In the event that the Auxiliary or any constituent chapter of the Auxiliary shall secede or withdraw, or make any attempt to secede or withdraw, all of the Auxiliary's or constituent chapter's funds and property of any kind shall forthwith be surrendered to and become the absolute property of the United States Section of the International College of Surgeons and subject to such disposition as the Executive Council of the United States Section of the Inter-

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Peruvian Section

Ninth Peruvian Congress of Surgery Held in Lima

Dr. José B. Velez Dies Canseco, F.I.C.S., of Lima, Peru, spoke on facial traumatic surgery at the Ninth Peruvian Congress of Surgery, which was held in Lima, March 27-31, 1955.

Members of the Peruvian Congress of Surgeons appreciate the scientific cooperation and friendly interest foreign surgeons have given the organization. **Dr. Daniel Becerra de la Flora,** Secretary of the Congress, stated that this sense of fellowship among the surgeons of other nations has stimulated scientific activity within Peru and progress in surgery throughout the American continent.

In addition to the speech by Dr. Canseco, **Dr. Marino Molina Scippa** spoke on the surgical treatment of the mitral valve and Dr. de la Flor lectured on massive gastroduodenal hemorrhage and its treatment.

From April 3-5 a meeting of the local Chapter of Surgeons was held in Chiclayo. **Dr. Juan Aita Valle** discussed the surgical treatment of gastroduodenal ulcer in Chiclayo, and **Dr. Jorge Stewart** presented a paper on the surgical treatment of inguinal hernia.

For further information regarding these meetings and the material presented or for information regarding future meetings of the Congress of Surgery, please write the **Secretaria Permanente del Congreso, Camana 773, Lima, Peru.**

Constitution of Woman's Auxiliary (Cont.)

national College of Surgeons shall direct.

Section 2. In the event of any conflict arising through interpretation of the constitution or by-laws of the Women's Auxiliary, involving any constituent chapter or any member thereof, regarding any other questions whatsoever, such conflicts shall be submitted to the Executive Council of the United States Section of the International College of Surgeons and to the International Board of Trustees, and the decision of the Board shall be final.

Article XI. Effective Date

This Constitution and these By-Laws shall be effective immediately upon adoption by the Executive Council of the United States Section of the International College of Surgeons; provided, however, that the officers and directors elected in September 1954, shall continue in office until expiration of their terms of office in September 1956, and provided further that the Executive Committee shall be organized and duly empowered to act upon appointment of the fifth member by the Executive Council as provided in Article VII of the Constitution.

By-Laws

Article I. Order of Business

Section 1. The following shall be the order of business of the Board of Directors, unless otherwise ordered.

1. Call to order by the President.
2. Roll call.
3. Reading and adoption of the minutes.
4. Reports of officers.
5. Reports of committees.
6. Reports of auxiliary chapters, presented by regional vice presidents.
7. Unfinished business.
8. New business.
9. Communications.
10. Adjournment.

Section 2. The Board of Directors shall be governed by Roberts' Rules of Order Revised, when not in conflict with these By-Laws.

Article II. Appointment of General Officers

Section 1. Officers shall be appointed at the Annual Assembly on alternate years and be installed at the same time as the newly elected Executive Council of the United States Section of the International College of Surgeons.

Article III. Duties of General Officers

Section 1. The duties of the officers shall be such as are implied from their respective titles and such as are specified in the constitution and by-laws.

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Hong Kong Section

Inauguration of Hong Kong Section

The thirteen Fellows of the United States Section of the International College of Surgeons who made a world tour in 1955 arrived in Hong Kong, China, on November 4 at 10:45 after a four-hour flight from Manila, Philippine Islands. While the principal reason for their visit to Hong Kong was the inauguration of the new branch of the China Section there, the importance and solemnity of the occasion was not allowed to put a damper on the spirit of adventure and enjoyment. From the moment they caught their first glimpses of this amazing city of 8,000,000 people until they boarded their plane to fly on to Thailand they packed every minute with exciting activities, both intellectual and recreational.

The view from the plane as they neared the mainland was outstanding. Masses of brilliant flowers contrasted with the green foliage around the homes, which seemed to cling precariously to the sides of the numerous mountains and hills about the city. These colors grew brighter and the landscape increased in beauty as they came in for a landing on the airport at Kowloon.

At the airfield they were met by a number of the members of the Hong Kong Section, who, after friendly greetings, immediately set the tone of the ensuing days by driving the visiting group to their hotel in their private cars, thus establishing the sense of being "at home" in this fabulous city.

Hong Kong is the garden city of the China Sea. The view from the Hotel Peninsula was startling; the guests could see the Mathilda Hotel situated on a peak 1,600 feet high across the city. The sea was full of shipping of all kinds: large liners; ships carrying both passengers and freight; all kinds and conditions of sampans; fishing boats with huge sails that looked like crazy quilts because of the patching done after they had been battered by the storms that are so prevalent

Drs. Kenneth Hui, S. H. Lin and Max Thorek at the Hong Kong meeting.

in that area and the busy, bustling little ferries that transport about 250,000 people every day from Kowloon to Hong Kong and back again.

After settling in at the hotel, the Americans prepared to attend the inaugural meeting of the new Section, which was held in the Medical School at the University of Hong Kong, and to which they were transported by jinrickshas. The "boys" who pull these vehicles run at a steady pace of 5 to 7 miles per hour until their destination is reached, whatever the distance may be.

The scientific meeting was well attended by doctors, medical students and a number of guests. After a short speech of welcome the American surgeons took part in the program, reading several papers on outstanding surgical subjects. **Dr. John Gray, F.A.C.S., F.I.C.S.**, Chairman of the new Section, expressed his pleasure in the large attendance, the excellent material presented and particularly the presence of the Fellows from the United States Section and of **Dr. J. Heng Liu** of Taiwan, Formosa. Dr. Liu is a charter member of the International College of Surgeons. He was instrumental in the founding of the old China Section, which received its charter on Oct. 4, 1944 (just ten years before this meeting). He is a member of the International Board of the College and of the reestablished China-Formosa Section. The members of the new Section felt highly honored by his presence among them.

The officers of the new Section, in addition to Dr. Gray, are: **Dr. Renald Ching**, Vice-Chairman; **Dr. Kenneth K. L. Hui**, F.A.C.S., Secretary, and **Dr. Ada S. H. Wong**, Treasurer.

After the meeting those present boarded a yacht and were taken to the Kumshing Restaurant for lunch. The food served in this floating dining room was typical of the excellent cuisine offered by China.

It was fortunate that they were able to include the luncheon in the program for this day, for on the following day typhoon "Pamela" arrived at exactly the hour predicted. "Pamela" caused some excitement in Hong Kong. The winds reached a velocity of 100 miles per hour, and for a time all city traffic was halted. The battle fleet took refuge in the harbor and was a memorable spectacle. The surgeons were delayed in leaving China, but this was a minor blessing in disguise, for it gave them time to dine at the Gadis Restaurant, where the finest Chinese and American foods are served.

Since Hong Kong is an "open" city, merchandise from all parts of the world is available at very reasonable prices, and everyone patronized the shops looking for gift items and for things they wanted for personal use. Tailor-made outfits could be obtained on twenty-four-hour notice. Almost everyone, including the wives in the party, took advantage of this exceptional opportunity, and soon the members of the party were wearing new, extremely smart garments which were purchased one day, made to order and ready to wear the following day.

Dr. Lin Shih-hsi with Dr. Y. P. Chan and Dr. Thorek during presentation of plaque.

With the storm passed and the skies again bright, the visiting group of surgeons returned to their schedule. After a luncheon of lobster thermidor with all the "trimmings," they were driven back to the airport at Kowloon to take off for Bangkok. Nevertheless, although they had new scenery, interesting experiences and good professional companionship to look forward to, they continued to look back at the beautiful, exotic, intriguing city they were leaving with a sense of loss and a feeling of deep gratitude for the entertainment the Fellows of the new Section had provided for their enjoyment. They remember the friendships, both personal and professional, which were made in Hong Kong, and look forward to the day when they may again visit this fascinating, picturesque city on the China Sea.

By-Laws of Woman's Auxiliary (Cont.)

Section 2. The President shall be the presiding officer of the Board of Directors and of the Executive Committee and of all special meetings. She shall be a member ex-officio of all standing committees. She shall appoint the chairmen of the standing committees, and shall appoint such special committees as she may deem necessary.

Section 3. The President-Elect, by active aid to the President and by membership on the Board of Directors during the term of her office, shall so conduct herself as to obtain the greatest possible acquaintanceship with the affairs and personnel of the Auxiliary as to enable her to fulfill efficiently the office of President when she succeeds thereto. She shall serve on all committees as a member ex-officio without the right to vote. In the absence or disability of the President, the President-Elect shall fill the vacancy.

Section 4. The First Vice-President shall have such powers and perform such duties as may be

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Thailand Section

Surgeons From the United States Section Visit Thailand

On Saturday, Nov. 6, 1954, after a flight of about four hours from Hong Kong, the group of surgeons from the United States Section of the International College of Surgeons who were making a tour around the world, visiting a number of Sections, caught their first glimpse of Bangkok, Thailand (Free Land), from the air. It seemed as though the Thai capital was protected by masses of lances and spears, since the outstanding feature of the landscape is the numerous roofs covered with glittering tiles and flashing spires. These are the nearly 400 Buddhist monasteries in Bangkok, which in addition to being the residences of the monks and the spiritual temples of all Buddhists, are the schools, hospitals, clubs, amusement parks, sports grounds and centers of artistic and economic development of the people.

The guests were met and welcomed at the airport by friends who had been in the United States, one of whom was **Dr. Sem Pring-puang Geo,** F.I.C.S., Consulting Surgeon of the Ministry of Public Health in Bangkok. They were then escorted to the Hotel Trocadero, where the city's best hospitality was provided.

On November 7, the visiting surgeons attended the scientific meeting of the Thailand Section. The program was presented at Santhidham Hall on the outskirts of Bangkok, the building in which the Thai legislature meets. It is a fine modern building; every desk in the well-appointed auditorium has a loudspeaker, and the meeting rooms reminded the participants of a United Nations assembly room.

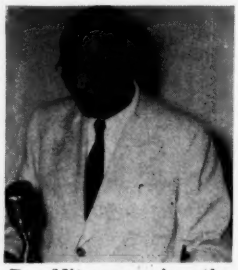
Lt. Gen. P. Pamon Montis, Minister of Health, addressing the Assembly.

Dr. Max Thorek, Founder of the International College of Surgeons, was Chairman for the session, with **Dr. Nitya Pauvedya Vejjavisit,** F.I.C.S., Director General of the Department of Medical Service, Ministry of Public Health of Thailand, and **Dr. Prachak Thongprasert,** F.I.C.S., as co-chairman. **Lt. Gen. P. Pamon Montis,** Minister of Health for Thailand, welcomed the visiting Fellows and the members and guests of Thailand, expressing his pleasure at the privilege of taking part in the inauguration of the Thailand Section. "News of the progress and success of surgery for various human ailments," he said, "has appeared in the newspapers and scientific journals to such an extent that the public is aware of the advancements made and of their improved chance for long life. . . . The work of the pioneer surgeons is held in great respect by the general public and by the men who follow in their footsteps.

"The inauguration of the Thai Section of the College today is indeed a step toward a greater future. Through this organization surgeons have the opportunity to meet together, discuss technics and exchange ideas for the improvement of their practice and the increase of their knowledge. From this close association the public will receive great benefits.

Dr. Nitya Pauvedya Vejjavisit receiving the charter of the Thailand Section of the International College of Surgeons from Dr. Max Thorek, Secretary-General of the College.

"I should like to take this opportunity," General Montis concluded, "to express my thanks to Dr. Max Thorek for his farsightedness and his courtesy in awarding Fellowships to many Thai doctors, and above all for his spirit of internationalism. I also want to thank the distinguished American visitors whose work is so highly thought of here, and to greet all who are present on this happy occasion."



Dr. Nitya opening the Thailand session.

The scientific meeting then continued, with presentation of the following papers: *Dupuytren's Contracture,* by **Dr. Henry W. Meyerding,** F.A.C.S., F.I.C.S., of Rochester, Minnesota; *Inflammatory Rectal Stricture: Surgical Treatment—Report of 719 Cases,* by **Dr. Harry Bacon,** F.A.C.S., F.I.C.S., of Philadelphia, Pennsylvania; *Management of Goitre,* by **Dr. J. Harry Hayes,** F.A.C.S., F.I.C.S., of Little Rock, Arkansas; *Evolution of Surgery of Gall Bladder,* by **Dr. Moses Behrend,** F.A.C.S., F.I.C.S., of Philadelphia, Pennsylvania, and *Present Status of the Treatment of Peptic Ulcer,* by **Dr. Ulysses Grant Dailey,** F.A.C.S., F.I.C.S., of Chicago, Illinois. The program ended with a question and answer period.

Among the interesting scientific visits made to hospitals was the one arranged by Dr. Sem and his associates for inspection of the Women's Hospital of Bangkok. This was a modern institution with the most up-to-date appointments. Here the surgeons saw a pair of Siamese twins about a year old, who were able to stand and cooperated well with the supervising nurse.

The most beautiful and peaceful entertainment offered the visitors was the 6:30 a.m. boat ride on the Chao Phya, or Menon, River (Mother of All Rivers) and through the canals which serve as major transportation arteries for Bangkok and the surrounding territory. From the first moment of the trip one sees fantastic and vastly interesting sights. There is the floating market and the numerous business houses along the banks of the canals, where one can purchase anything from a pin to a ship. Sailing on the canals at this early hour one sees also the small power boats which serve as river restaurants. The people often buy their breakfasts there, although many, of course, prepare their food in their own homes. The long ride through these tortuous waterways never becomes dull. The scenery and the sights are constantly changing. Before returning to the Trocadero Hotel one sees the Wat Arun (Temple of Dawn), a beautiful tower covered from top to bottom with colorful mosaic designs.

On Monday evening, November 8, the Thailand Section gave a buffet dinner in honor of its American guests. A number of exotic foods, traditional Siamese dishes, were served, including roast suckling pig and innumerable tropical fruits, most of which the visitors had never before tasted. Many of the American residents of Bangkok (which has an American population of about 1,000) attended this banquet.

After the dinner the inauguration ceremonies were held. Dr. Thorek presented the Charter of the Thailand Section to Dr. Nitya Pauvedya Vejjavisit, and the degrees of the College were given to the Fellows of the new Section, including Dr. Nitya and Lt. Gen. P. Pamon Montis.

Lt. Gen. P. Pamon Montis, Minister of Health for Thailand, with Major Nitya Pauvedya Vejjavisit, President of the Thailand Section of the College and a member of the Ministry of Health, after receiving their diplomas in Bangkok.

When the inaugural services were over, a group of dancers in traditional costume entertained the assemblage with a series of four ancient dances. The first was the Blessing Dance, with the ceremonial motion of the giving of flowers, the traditional welcome to Thailand.

Dr. Meyerding addressing the scientific session of the Thai Section of the College in Bangkok.

The group then performed a dance of Northern Thailand, in which the ceremonial position of the hands signified invocation of the blessings of the Gods upon the visitors. The headdress, made up of flowers, was typical of Northern Thailand.

This was followed by an interpretive dance from Southern Thailand, Ma No Ra. The title of this dance is the name of the girl who is the central figure of the story. She is very beautiful and has wings like a bird. Once in a while she and her birdlike companions come from their land beyond, where there are no people, to visit earth. Ma No Ra is seen by a hunter, and the dance portrays his attempts to capture her.

The last dance was from Eastern Thailand and was a dance of courtship, which proved abundantly that boys and girls are much the same always and everywhere.

On Tuesday the visiting surgeons were taken to the airport after luncheon, and at 1:40 p.m. they departed for Bombay. Their last view of Thailand was again the startling glory of gilded, mosaic or brilliantly lacquered spires dominating this land of Buddhism. The Americans agreed that the fascination and beauty of Thailand was incomparable, and spoke with warm appreciation of the hospitality and royal entertainment they had enjoyed. Not only did every Fellow of the new Section give them a cordial welcome and a sense of personal friendship, but it seemed that all the people of Bangkok received them as long-awaited guests. The visiting Fellows will never forget the people of Thailand. A deeper realization of the brilliant minds and impeccable professional integrity of Thai surgeons will remain with them, and they will look forward to the day when, here in the United States, they may return the generous hospitality of Thailand.

By-Laws of Woman's Auxiliary (Cont.)

delegated to her by the Board of Directors and shall serve as Chairman of the Membership Committee. In the absence or disability of the President-Elect, the First Vice-President shall fill the vacancy.

Section 5. Each of the regional Vice-Presidents shall develop and supervise the extensional program of the Auxiliary in a specified territory assigned to her.

Section 6. The Recording Secretary shall keep the minutes of the proceedings of the Board of Directors' meetings in a bound book and shall read the same at the stated meetings. She shall perform such duties as she is directed to perform by the Board or by the President. She shall be the custodian of all records, books, and papers belonging to the Auxiliary, the Auxiliary Seal, and the bond of the Treasurer. She shall also keep a record of the activities of all constituent branches.

Section 7. The Corresponding Secretary shall be responsible for the official correspondence of the Auxiliary, including such matters as notifying members of meetings, officers of elections, committees of their appointments and duties, and all notices required by the Constitution and By-Laws or by order of the Board of Directors.

Section 8. (a) The Treasurer shall be the custodian of the funds of the Auxiliary and shall deposit them in a depository approved by the Board of Directors. Disbursements may be made by the Treasurer upon authorization by the Board of Directors, or upon the adoption of a resolution by the Board of Directors, by a majority vote, disbursements may be made upon the authorization of a majority vote of the Execu-

(Continued on page 138)

Woman's Auxiliary

Auxiliary Notes From the President's Desk

We hope that every member of the Woman's Auxiliary is planning to attend the Twentieth Annual Congress of the United States and Canadian Sections of the International College of Surgeons in Philadelphia, September 12-15. It is not too early to be thinking of hotel reservations and arranging your busy schedules to include this important event. We are hard at work on a program of entertainment which we hope will appeal to everyone. We shall take full advantage of the unique places of historic interest in the Philadelphia region as well as trying to find features which will interest varied tastes.

* * *

Our gratitude goes to **Mrs. McKenzie Hallson** for her excellent work as chairman of the Entertainment Committee for the regional meeting held in Houston, Texas. Those who attended this meeting were most enthusiastic about the program which she had planned and the gracious hospitality evident during their stay in Houston.

* * *

For the second year, the Woman's Auxiliary scholarship of five hundred dollars, to be awarded to a senior student in the school of medicine at the University of British Columbia, has been presented to the University.

* * *

The announcement of the two Woman's Auxiliary Surgical Fellowships of three thousand dollars each has been sent to universities and colleges here and abroad. A committee of International College of Surgeons members will select the most highly qualified applicants from those applying.

* * *

Mrs. Donald L. Dickerson, chairman of the Woman's Auxiliary Memorial Fund, will welcome any gifts from one dollar up, and a card in the name of the donor will be sent to the family of the person in whose memory the donation is received. Printed blanks to use in making gifts may be secured by writing Mrs. Dickerson at her home address: 2315 North Vermilion, Danville, Illinois.

GAIL BROOK BURKET, President

By-Laws of Woman's Auixiliary (Cont.)

tive Committee. Whenever required by the Board of Directors or by the Executive Committee, the Treasurer shall render a statement of her accounts; she shall make an annual report to the Executive Council of the United States Section of the International College of Surgeons and shall, upon request, exhibit her books and accounts to any member of the Board or to any member of the Executive Council of the United States Section of the International College of Surgeons. The Treasurer shall perform all acts and duties incident to her office, subject to the control of the Board of Directors and of the Executive Committee. (b) Between March 1 and April 1 annually the Treasurer shall submit to the Board of Directors a statement of paid-up members of each constituent chapter. (c) The accounts of the Treasurer shall be audited by a certified public accountant, designated by the Board of Directors, with the approval of the Executive Council of the United States Section. The Board shall also require a commercial bond for the faithful performance of her duties. The Auxiliary shall pay for this bond.

Article IV. Standing Committees and Their Duties

Section 1. The Standing Committees, other than the Executive Committee, of the Auxiliary consist of the following:

1. Finance Committee
2. Program Committee
3. Public Relations Committee
4. Hall of Fame Committee
5. Post Graduate Education Committee
6. Ladies' Entertainment Committee
7. Organization and Membership Committee

Section 2. The Chairman, or some member designated by her, of each of these committees

shall submit an annual written report of its activities. Copies of these reports shall be submitted to the Executive Council of the United States Section of the International College of Surgeons.

Section 3. The Chairman of each of the above-mentioned committees, with the exception of the Organization and Membership Committee and the Finance Committee, shall be appointed, subject to confirmation by the Board of Directors, or in the absence of the Board of Directors by the Executive Committee, by the incoming President as soon as possible after she assumes the duties of office. The First Vice-President shall serve as Chairman of the Organization and Membership Committees. The Treasurer shall serve as chairman of the Finance Committee. The chairman of each standing committee, subject to the approval of the President, shall select the members of her committee.

Section 4. The Finance Committee shall consist of five members: The Treasurer who serves as chairman, the retired Treasurer, two members of the Board of Directors, selected by the Board, and one member appointed by the President.

Section 5. The Organization and Membership Committee shall consist of the First Vice-President, regional Vice-Presidents and twelve other members. The First Vice-President shall serve as Chairman. Each regional Vice-President shall appoint three members from her assigned territory. The duty of this committee shall be to encourage the organization of local chapters.

Section 6. The Program Committee shall consist of a Chairman and one member from each of the four major sections of the country, whose duty it shall be to familiarize itself with the work of this Auxiliary and of the United States Section of the International College of Surgeons, and suggest programs for the constituent chapters.

Section 7. The Public Relations Committee shall consist of a Chairman and one member from each of the four major sections of the country. It shall be the duty of this committee to foster interest in matters of public importance relative to the educational program of the International College of Surgeons, and, through the constituent chapters and with the approval of the Executive Council of the United States Section, to correlate the work of the Auxiliary with that of other organizations.

Section 8. The Hall of Fame Committee shall perform such duties connected with the International Surgeons' Hall of Fame and Museum of Surgical Science as shall be requested of them by the Executive Council of the United States Section or by the International Board of Trustees of the International College of Surgeons.

Section 9. To aid the Woman's Auxiliary in disbursing funds for postgraduate education, a Postgraduate Education Committee consisting of five surgeons who are Qualified Fellows of the International College of Surgeons shall be appointed by the Executive Council of the United States Section of the International College of Surgeons. This Committee shall draw up plans and detailed requirements governing the procedure of application for grants-in-aid to surgeons who desire to pursue postgraduate study, specifying who may apply, and setting forth the criteria which shall guide the Committee in granting funds for postgraduate surgical education. This Postgraduate Committee shall consider all applications and shall recommend to the Executive Council of the United States Section of the International College of Surgeons the candidates whom they approve as recipients of grants. When any such proposed grant has been approved, or modified and approved, by the Executive Council of the United States Section of the International College of Surgeons, and by the Board of Directors of the Woman's Auxiliary or its Executive Committee, the Treasurer shall disburse the funds of the Woman's Auxiliary in accordance with the recommendations as thus approved.

Article V. Constituent Chapters

Section 1. This Auxiliary will recognize as a constituent chapter any Woman's Auxiliary to a state or territorial surgical section of the United States Section of the International College of Surgeons whose objects and policies shall comply with the objects of this Auxiliary and whose membership is composed of qualified members.

Section 2. Each constituent chapter shall follow the outline of functions of this Auxiliary.

Section 3. Each constituent chapter shall transmit to the Treasurer of this Auxiliary the annual dues for each member, not later than March 15. Failure to transmit such dues prior to March 31 shall deprive that constituent chapter of its membership in the Auxiliary, unless for good cause shown the Executive Committee grants an extension of time for payment of dues.

Article VI. Policy

Section 1. This Auxiliary shall not affiliate with other federated organizations, nor provide

for representation on its Board of Directors of representatives of other organizations, nor be itself officially represented on the Board of other organizations without the approval of the Executive Council of the United States Section and the International Board of Trustees.

Section 2. No commercial interest nor any candidate for public office shall be endorsed by the Auxiliary. Neither the name of the Auxiliary nor the name of any officer in her official capacity shall be used in any connection with a commercial concern or with any political interest, nor in the support or defeat of any legislation.

Section 3. All circular letters and instructional material must be approved by the Board of Directors and the Executive Council of the United States Section of the International College of Surgeons, except routine communications incident to the performance of their official duties, as provided in these By-Laws.

Mrs. Eugene Park Nicely Honored

Mrs. Eugene Park Niceley was recently crowned Knoxville's First Lady for 1955 at a meeting of the Beta Sigma Phi nonacademic sorority at Deane Hill Country Club, Knoxville, Tennessee.

Mrs. Niceley is an active member of the Woman's Auxiliary of the United States and Canadian Sections of the International College of Surgeons. She is Parliamentarian for the Woman's Auxiliary to the Knox County Medical Society; a member of the Board of Directors of the Woman's Auxiliary to the Tennessee State Medical Society; Second Vice President of the Woman's Auxiliary to the Southern Medical Association; Past President of the Woman's Auxiliary to the Knox County Medical Association and the Tennessee Medical Association, and a member of the Woman's Auxiliary to the American Medical Association. She is also a member of the Cedar Grove Community Club; of the Knoxville Branch for the Preservation of Tennessee Antiquities; of the Bearden Parent-Teachers Association; of the Knoxville Symphony Guild; of the Y.W.C.A.; of the Cherokee Country Club, and of the Cat and Fiddle. She is assistant troop leader of Girl Scout Troop 56 of Knoxville and an active member of the First Presbyterian Church of Knoxville.

Mrs. Nicely, wife of **Eugene Park Niceley**, M.D., F.A.C.S., F.I.C.S., was selected for the honor because of her work in cultural, social and civic groups.

For information pertaining to qualifications for

FELLOWSHIP, ASSOCIATE AND JUNIOR MEMBERSHIP

in the United States Section
of the International College of Surgeons

Write KARL A. MEYER, M.D., F.A.C.S., F.I.C.S., Secretary
1516 Lake Shore Drive, Chicago 10, Ill.

Indian Medical Association Desires to Place Selected Indian Medical Graduates in Residencies

AMA Cooperates with Indian Medical Program

The Indian Medical Association is sponsoring a program that will make it possible for selected graduates of Indian medical schools to secure special training in the United States. **Dr. S. C. Sen,** President of the Association, has requested and obtained the assistance of the American Medical Association, which is supplying to all United States hospitals which are approved for resident training the following list of candidates now available:

Orthopedic Surgery

Dr. Prithi Singh Greval, M.B., B.S., 1953. Born March 20, 1931. Married. One year house job in surgery, completed January 1955; still working.

Ear, Nose and Throat

Dr. Ram Prakash Gupta, M.B., M.S., 1943. Born March 1, 1918. Married. Postgraduate training, ENT department, KEM Hospital, Bombay, 1945-1946; doing operative and nonoperative work in ENT diseases as private practitioner, 1946-1954.

General Surgery

Dr. P. N. Banerji, M.B., M.S., 1952. Born Feb. 20, 1931. Single. Fifth in University final examination. From 1952 to date, engaged in surgery as house surgeon, casualty medical officer and clinical assistant. Appearing in MS in 1955.

Dr. S. N. Kapoor, M.B., M.S., 1953. Born Sept. 15, 1931. Single. House surgeon since passing in Gandhi Memorial and Associated Hospitals, Lucknow. About one year internship in Medical College Hospital.

Dr. G. Lakshman Reddy, M.B., B.S., 1949. One year house surgeon in KG Hospital, Vizagapatnam; 3 years private practitioner.

Dr. A. K. Ghosh, M.B., B.S., 1951. Born Feb. 19, 1930. Single. Junior house surgeon and at present senior house surgeon, KG Medical College, Calcutta, since April 1953.

Pediatrics

Dr. Leela K. Bhavnani, M.B., B.S., 1951. Born Nov. 1, 1926. Female; single. Dr. Moolgaunker's Nursing home, one month; Sir CJ Ophthalmic Department of JJ group of h hospitals, Bombay, over four months; Health Department, Bombay Municipal Corps, from July 1, 1952; still employed as medical officer in charge of dispensary; also runs private nursing home.

Dr. Indira Krupanidhi, M.B., B.S., 1953. Born July 25, 1930. Female; single. House physician, medicine, six months; house surgeon two months; still working.

Dermatology

Dr. T. S. Sambasivan, M.B., B.S., 1940. Born May 3, 1919. Married. Served in Army Medical Corps as captain during war for more than five years.

Dr. Anjani Kumar, M.B., B.S., 1950; LMP, 1948. Born Jan. 30, 1928. Married. House surgeon December 1950 to June 1951; medical officer, Hilsa District Board dispensary, August 1951 to August 1954; still working.

Obstetrics and Gynecology

Dr. P. C. Papaiah, M.B., B.S., 1951. Born May 26, 1928. Female; single. House surgeon, 1952-1953; temporary Class II M/O six months; confirmed appointment Jan. 13, 1954. Working since Jan. 7, 1954. Six months resident house surgeon course for DGO, Bombay.

Dr. Kusum Gopal Saraf, M.B., B.S., 1950; LCPS, 1946. Born Dec. 27, 1921. Female; married. House job, surgical and medical, seven months; filled terms for DGO and worked as house surgeon, medical officer in charge, four months; medical officer in charge, Military Maternity Home and Welfare Center, six months; serving

as medical officer in charge of BD Charitable Dispensary and Maternity Home, past four years.

Dr. Pritam Kaur, LSMF, 1942; postgraduate in TB, 1945. Born Oct. 7, 1921. Female; married. House surgeon, Lady Atchison Hospital, 1942-1943; gynecology and major surgery, Girdhari Lal Rururi Hospital, Dehradun; honorary gynecologist, Coronation Hospital, Dehradun.

Dr. Padma Handa, M.B., B.S., 1953. Born Oct. 22, 1929. Female; single. Over one year house job, Lady Hardinge Medical College, New Delhi.

Dr. V. P. Bhoopatkar, M.B., B.S., 1949. D.G.O., 1952; diploma in obstetrics and gynecology. Born Nov. 28, 1922. Female; single. Resident house surgeon in midwifery and gynecology, six months; resident house surgeon in gynecology four months; postgraduate study in general medicine, three months; postgraduate study in obstetrics and gynecology, nine months; postgraduate study in gynecology, nine months.

Dr. J. H. Fonseca, M.B., B.S., 1948; M.D. (obstetrics and gynecology). Born April 24, 1923. Single. Resident accoucheur, Maternity Hospital, six months; postgraduate work in obstetrics, six months; postgraduate work in gynecology, one year; casualty officer and anesthetist, two and one-fourth years; acting resident medical officer, one year; senior registrar, obstetrics and gynecology, Municipal General Hospital, May 1, 1953, to date.

Dr. S. Arora, M.B., B.S. Born May 26, 1923. Female; single. House surgeon, obstetrics and gynecology, one year; demonstrator in obstetrics and gynecology, MGM Medical College, Indore, August 1952 to date; worked in research problems of the department.

Ophthalmology

Dr. K. Lall, M.B., B.S., 1953. Born April 1, 1929. Single. House surgeon in a blind relief society eye hospital, Patna, October 1953 to February 1954; house surgeon in eye department, Delhi, March to June 1954; diploma in ophthalmology, Aligarh University.

Dr. Narendra Krishna, M.B., B.S., 1953. Born June 8, 1930. Single. Hon. house surgeon, Irwin Hospital, Delhi, six weeks in 1953; resident house surgeon, Dr. Shroff Charitable Hospital, Delhi, January 1953 to date.

Dr. V. V. Kayarkar, M.B., B.S., 1943. Born May 9, 1915. Married. Experience as medical officer, eleven years; postgraduate training in ophthalmology, Bombay, April 1949 to April 1950.

Industrial Medicine

Dr. A. M. Sharangpani, M.B., B.S., 1942. Born May 9, 1915. Assistant medical officer, Lakshmi Mill, Sholapur, December 1949 to date. Runs dispensary for nearly 14,000 textile workers and their families. Runs a creche for about 100 children and a maternity home for the workers' families.

Dr. S. N. Dhananjay, M.B., B.S., 1947. Born May 27, 1921. Married. One year house surgeon, Victoria Hospital, Bangalore; has held present post as industrial medical officer for the past six years. Underwent examination for "Certificate in Industrial Health" at All-India Institute of Health, Calcutta, and secured first rank, 1952.

Graduates from Indian medical schools may be appointed to the resident staff without prejudice to the hospital's approved status. Hospitals interested in applications from any of these physicians are requested to communicate by air mail with Dr. Sen, who will supply any further information required. Address: Dr. S. C. Sen, President, Indian Medical Association, Hanging Bridge, Daryaganj, Delhi 7, India.

The Medical Newsfront

World Congress of Health Meets in Mexico City

The World Congress of Health convened in Mexico City on May 10, 1955. The President of the Republic of Mexico, **Sr. Adolfo Ruiz Cortines,** presided over the meeting as Honorary President.

The International College of Surgeons wishes to express its pleasure in the honor of being paid to Mexico and to Mexico City in being chosen as the site of this meeting of physicians and surgeons from all corners of the earth. The work being accomplished by the World Congress of Health is of inestimable value to both the medical profession and to the people of the world. The College appreciates being permitted to assist in this work in any manner since it is so vitally in accordance with the principles and hopes upon which the College is founded.

Melanoma Research

A joint attack upon a single type of cancer — the malignant melanoma — has been organized through a cooperative group research program between The University of Texas M. D. Anderson Hospital and Tumor Institute in the Texas Medical Center, Houston, and the University of Oregon Medical School, Portland.

The cooperative effort, organized in December 1954, will be known as the "Melanoma Study Section," and is the second such group research effort organized by The University of Texas M. D. Anderson Hospital. The first was the "Cancer Eye Study Section," with the Iowa State College, the Oklahoma Agricultural and Experimental Station, and the Department of Genetics, The University of Texas, for the study of squamous ocular carcinoma in cattle.

The Melanoma Study Section plan combines the basic sciences and medical specialties available in a cancer research, education and treatment center and in other institutions that have scientific personnel and research facilities oriented in the research problems undertaken.

On February 15, the National Cancer Institute recommended approval of grants for the Study Section concerned with the diagnosis, chemotherapy and microbiologic studies of melanoma.

Holley Medal Awarded to Prof. Hood

George J. Hood, professor emeritus of the University of Kansas School of Engineering, has been named to receive the Holley Medal, it was announced here today by **David W. R. Morgan,** president of the American Society of Mechanical Engineers.

The award, which is administered by the Society's Board on Honors, is "bestowed for some great and unique act of genius of an engineering nature that has accomplished a great and timely public benefit." The citation accompanying the Holley Medal honors Professor Hood "for his act of genius in inventing the dermatome, a skin-grafting machine, making possible surgical treatment of severe burns and other denuding injuries."

Other valuable inventions by Professor Hood include gas engines, a gas explosive pump, drawing instruments, an autographic device for the film pack and a photographic method for producing perspective layouts from aircraft sections.

Dudley Jackson Fellowship Established

Establishment of the Dudley Jackson Fellowship in Malignant Disease at The University of Texas M. D. Anderson Hospital and Tumor Institute, honoring **Dr. Dudley Jackson,** F.A.C.S., of San Antonio, Texas, was announced Friday, March 11.

Dr. R. Lee Clark, Jr., F.A.C.S., director of Anderson Hospital, who made the announcement at the ninth annual symposium on Fundamental Cancer Research banquet, said that the fellowship would be a living memorial to Dr. Jackson and his work.

Dr. Jackson has been active in cancer research for a quarter of a century. He published his first paper on cancer in 1928 —a report on cancer in overweight persons and in those afflicted with diabetes.

With the late congressman, Maury Maverick, he worked on a bill setting up the National Cancer Institute, which today sponsors and coordinates much of the cancer research being conducted in this country. The bill was passed in 1936.

In April 1941, Dr. Jackson was awarded a certificate of distinguished service for five consecutive years of work with the Women's Field Army.

Earlier this year (1955) he was awarded the American Cancer Society's annual bronze medal for outstanding contributions to the cause of cancer control.

Tax-Exemption for Visiting Professors

The Internal Revenue Service has ruled that when the primary purpose of a professor or teacher from the United Kingdom of Great Britain and Northern Ireland in visiting the United States on an exchange visitor's visa is to teach, lecture or instruct at a university for not more than two years from the date of arrival, the entire compensation or income received for such services is exempt from Federal income tax . . . This rule, however, does not apply if the primary purpose of the visit to the United States is the pursuit of research and like duties, so that any teaching is incidental to such research.

While the primary purpose of the visit to the United States must be to teach or instruct, there is a degree of flexibility permitted in determining what constitutes a primary purpose to teach or lecture. Thus, it is recognized that the normal duties of a teacher embrace not only formal classroom work involving regularly scheduled lectures, demonstrations or other student participation activities, but also the less formal methods followed in seminars or other informal groups as well as efforts undertaken jointly in a laboratory. For example, a teacher in scientific fields will often have, as one of his duties, the supervision of research projects o graduate students. This would be considered within the phrase, "for the purpose of teaching," as would any activity in which a teacher engages for the purpose of conferring on students the benefit of his knowledge and methods as distinguished from the pursuit of his own project.

This ruling appears in the Internal Revenue Bulletin No. 15, April 11, 1955. Copies may be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., for ten cents per copy.

Parke, Davis & Company to Rush Production of Pólio Vaccine

Parke, Davis & Company, which produced a major portion of the polio vaccine for the National Foundation for Infantile Paralysis at cost in 1954 and 1955, plans to make the vaccine commercially at a rate reaching 300,000 complete immunizations a week before the year closes.

Harry J. Loynd, president, said on April 12 that the firm—after being licensed by the National Institutes of Health—would begin to make the vaccine within two weeks for distribution "through regular channels on the most equitable basis possible." The list price, not including the doctor's fee, will be $6 for one complete immunization (three 1 cc. shots).

Special clinical tests of the Parke-Davis poliomyelitis vaccine involving 2,200 children in Joliet and Will County, Illinois, showed that 98 per cent of those successfully inoculated had no side reactions. In the remaining 2 per cent the reactions were minor— redness of the arm, soreness at the time of injection, slight fever and headache.

Fellowship Awarded to Dr. Samuels

The Jesse H. Jones Fellowship in Cancer Education honoring **Dr. E. W. Bertner**, F.A.C.S., was awarded Friday evening, March 11, to **Dr. Melvin L. Samuels** at the banquet of the ninth annual symposium on fundamental cancer research, sponsored by The University of Texas M. D.

Anderson Hospital and Tumor Institute.

Dr. Samuels, a graduate of Villanova University and Jefferson Medical College in Philadelphia, Pennsylvania, was resident in pathology at Baylor Hospital in Dallas. He will be in the department of medicine at Anderson Hospital.

The Cancer Education fellowship honoring Dr. Bertner, the first acting director of Anderson Hospital and the first president of the Texas Medical Center, was established in 1950, by Houston Endowment, Inc., a philanthropic organization established in 1937 by **Mr. and Mrs. Jesse H. Jones** for the support of any charitable, educational or religious undertaking. Its purpose is to encourage physicians and scientists to prepare more effectively for caring for cancer patients, for teaching related to neoplastic and allied diseases, and for carrying out research work in the field of malignant disease. It also provides the opportunity, through a reciprocal exchange program, for graduate study in affiliation with the Memorial Hospital Center for Cancer and Allied Diseases in New York.

A.M.A. Presidential Inaugural to Stress Faith

The American Medical Association will stress the importance of faith in medical practice when it inaugurates its 109th president on Tuesday, June 7, at its annual meeting in Atlantic City.

Incoming President **Dr. Elmer Hess,** of Erie, Pennsylvania, will lead the doctors at the inaugural ceremony in a program called "Medicine's Proclamation of Faith."

Dr. Hess, a former president of the American Urological Society, heads the urologic departments of St. Vincent's and Hamot Hospitals in Erie. A former A.M.A. delegate, he is editor and publisher of the Urolog, a quarterly bulletin.

Guest speaker for the event will be **Norman Vincent Peale,** D.D., pastor of the Marble Collegiate Church of New York City. The Temple University Concert Choir of Philadelphia will take part in the program. The dramatic "Proclamation of Faith," including Dr. Hess' inaugural address and Dr. Peale's speech, will be broadcast over 345 stations of the American Broadcasting Company network.

Other participants will be **Dr. Walter B. Martin,** Norfolk, Va., outgoing president and chairman of the A.M.A. Board of Trustees; **Dr. Dwight H. Murray,** Napa, Calif., speaker of the House of Delegates, and **Dr. James R. Reuling,** Bayside, L. I., winner of the A.M.A. Distinguished Service Award for 1955.

Philippine Surgical Journal Expanded

A letter from **Dr. Luis F. Torres,** Editor, informs us that, beginning with the January 1955 issue, the *Philippine Journal of Surgery* is now jointly sponsored by the Philippine College of Surgeons and the Philippine Obstetrical and Gynecological Society and is published under the new title *Philippine Journal of Surgery, Obstetrics and Gynecology.*

There has been no change in editorial policy, and ownership remains with the Philippine College of Surgeons, but the new setup offers a wider coverage. A new editorial staff, composed of leading specialists in surgery, obstetrics and gynecology, has been formed.

Dr. Torres expresses the hope that the friendly cooperation of other professional publications will continue. The mailing address is unchanged: 1023 Taft Avenue, Manila, Philippines.

Military Medical and Pharmaceutical Congress, Luxembourg, Nov. 7-13, 1954

A report of the proceedings of the Fourteenth International Congress of Military Medicine and Pharmacy indicates that matters of permanent interest were discussed. Thirty-seven countries were represented by delegates, and others sent observers. After a tribute to the Prince of Luxembourg for his energy and initiative in 1938, when he called the Congress together to plan protection of civilian populations in wartime, **Major Felten,** Chairman of the Fourteenth Congress, underlined the importance of the meeting, which created a friendly understanding among members of army health services throughout the world. A number of vital

issues were taken up:

1. *The status of military medicine. Should it be considered a specialty?*

This question was answered in the affirmative. It was also emphasized that civilian medicine, in times of total war, must face problems similar to those of military medicine.

2. *The role of national medical associations in wartime; coordination of civil and military services; preparation in peacetime.*

It was pointed out that the coordination of civilian and military medical services requires a complete inventory of personnel, medications and hospital facilities. For maximum safety, the various resources should be pooled. Final decisions should be the responsibility of a high authority.

3. *The functions of wartime health services in mountainous regions.*

Such areas present great difficulties in evacuation, which must be done by helicopters, and in the provision of supplies, which must be dropped by parachute. Soldiers must be specially trained for mountain warfare. The many problems of equipment, food supplies, and resistance to frostbite and burns were exhaustively discussed. It was pointed out that men stationed more than 9,000 feet above sea level must depend on first aid and be prepared to wait for evacuation. It was noted that, in the mountains, the igloo offers maximum protection against frostbite in the wounded. Base hospitals, of course, must be built at much lower levels. In view of these special considerations, the psychic preparation of soldiers for mountain service was thoroughly studied.

4. *Modern methods for the prevention of burns and treatment of the wounded.*

In wartime, standardization of treatment is absolutely necessary. If the use of a new method involves any loss of time in treatment, it should not be used. The fact that antibiotics, for instance, carry with them a certain sense of security, does not alter the necessity for immediate treatment. The handling of burned patients was discussed in detail, and methods were proposed for dealing with thermonuclear disasters.

The pharmaceutical section heard reports from the Argentine and Brazilian delegates. National Military pharmacy in war and peace was studied, with the conclusion that committees should be formed to supply the necessary information to all nations affiliated with the Congress. The odontostomatologic section dealt with modern diagnostic methods, e. g., roentgenography and photography of the oral cavity, and also discussed in some detail, the identification of cadavers by means of dentures.

At the end of the final session, the Argentine delegates extended an invitation for the next meeting, in 1956, to be held in Argentina, which was accepted with much pleasure. A number of timely and important topics were chosen, and each was turned over to two member countries for study in the interval and report in 1956. On the whole, the occasion was highly significant, in view of the unsettled political state of the world, and the serious view taken of the problems involved was eloquent of the awareness of the profession of the heavy responsibilities it must assume.

—*Abstracted by Dr. George R. Laub*

New Publication Appears

A new departure in the field of publishing was started with the January 1955 issue of *Mead Digest,* which is written especially for residents and interns. It discusses the problems, both economic and professional, that face every young doctor as he finishes his hospital training period. It includes particularly the "how to" questions that arise in launching a new career.

The new magazine will be published in November, January, March and May of each year and mailed free to all residents and interns in hospitals throughout the United States. Among other topics discussed are: *Outfitting an Office at Minimum Cost* and *How to Write a Letter of Application.* Future issues will include: *How to Establish a Fee Schedule, Professional Management Consultants Can Help the Young Doctor, How to Pick a Location,*

Pros and Cons of Partnership and many other pertinent subjects.

Medical Faculty of the National University of Mexico Moves into New Home

The Faculty of Medicine of the National University of Mexico will move into a beautiful new building in Mexico City in the near future. The majority of the Faculties, Schools and Institutes of the National University of Mexico have already been transferred to the new building, which is the successful completion of a project that has been planned for some time.

Course Offered in Clinical Pastoral Care

An introductory course for graduate students in clinical pastoral care is being given by New York University's department of religious education in cooperation with Bellevue Medical Center. The program was begun in September 1954.

Special seminars; prescribed readings and reports; lectures by medical doctors, psychiatrists, sociologists, and the Bellevue chaplaincy staff, and personal guidance in visiting patients (whether physically or mentally ill), in conducting interviews, in "counseling" and in preparing full case histories constitute the program given under the supervision of **Dr. Lee A. Belford,** chairman of the department of religious education at New York University's School of Education and the Protestant Chaplaincy of Bellevue.

New Clue Found in Cancer Research

Drs. James and **Elizabeth Miller,** husband-and-wife team at McArdle Memorial Laboratory, using a cancer-causing chemical with the jaw-breaking name of 2-acetylaminofluorene, have uncovered further evidence that cancer is caused by a frustrated protein. They found that when the chemical was fed to rats it became attached to protein throughout the animals' bodies and caused cancer to develop in certain tissues.

This "protein-binding" and cancer-causing relationship is similar to the action of cancer-causing azo dyes and hydrocarbons with which the Millers have been working for a number of years. The azo dyes helped them develop their cancer theory when they observed that the dyes, which caused cancer of the liver in rats, also bound with a certain protein in that organ. This liver protein, the Millers believe, is an enzyme—one of the many workers employed by the cell to obtain and process raw materials it needs for normal function. When the dye, or one of its components comes along, the protein snaps it up; then, like a little boy with his hand stuck in taffy, it finds it can't use the dye, nor can it let it go. The protein is out of commission. This particular enzyme system seems important to the normal activities of the cell. Without it certain controls are gone, the remaining enzymes begin to use products from the body's production line for reduplication, the cells multiply wildly, and eventually a tumor develops.

Cancer was produced by 2-acetylaminofluorene in four body areas in the rats used by the Millers — liver, breast, ear duct, and intestine. As with the azo dyes, changes in protein accompany formation of tumors in these tissues. Interestingly, the chemical used by the cancer team in their research almost became an insecticide in 1941. But, as it does with every new chemical suggested for agricultural use, the United States Department of Agriculture put the substance through its paces, looking for undesirable side effects. When, after several months, tumors began to appear in animals used in the tests, the chemical was quickly discarded.

The nature of 2-acetylaminofluorene is such that the Millers treat it "with respect." "In addition to producing cancer in many tissues, it is also known to produce cancer in many species," Dr. James Miller pointed out.

New Products

New Rapid-Acting Spinal Anesthetic

Sympocaine, a new anesthetic under clinical study by Winthrop-Stearns Inc., has been found one and one-half times as potent as Pontocaine (tetracaine), very rapid in action and relatively nontoxic when administered spinally, according to a research team headed by **Dr. Max S. Sadove,** F.I.C.S.

The investigators (*Anesthesia and Analgesia* 33:366, 1954) say that the duration of anesthesia induced by the drug is midway between that induced by procaine and Pontocaine. On the basis of tests with 382 patients at the Veterans' Administration Hospital in Hines, Illinois, further clinical trial with Sympocaine is justified in their opinion. Later, the group will publish its evaluation of the drug's effectiveness in nerve block anesthesia. "No reactions to the local anesthetic were encountered" in a number of regional nerve blocks already performed, the authors say.

The average duration of spinal analgesia with Sympocaine was approximately two and one-half hours when a 0.5 per cent hyperbaric solution without epinephrine was used. The duration was prolonged to three hours when epinephrine was employed, with no increase in the incidence of side reactions. In isolated cases, analgesia persisted "six hours or longer."

Animal and clinical tests indicate that Sympocaine is as fast-acting as any present anesthetic. In the Sadove study the average onset time ranged from 1.1 to 2.0 minutes.

As to side effects, the group found hypotension the most common and "more frequent in the high than in the low spinals."

"The occurrence of hypotension is more a sign of height of spinal anesthetic level than a true side reaction," they report, adding that it "was always transitory and responded to oxygen and small doses of vasopressors. There were no cases of prolonged or irreversible hypotension."

Assisting Dr. Sadove were **Drs. Myron J. Levin** and **Raymond F. Rose,** also associated with the Hines V. A. Hospital and the University of Illinois College of Medicine.

Spiral-Wound Surgical Gut

A release from Davis & Geck, Inc., a unit of American Cyanamid Company, announces the production of "an efficient and economical spiral-wound plain surgical gut." The new product, available in sizes 4-0 to 1, is said to provide twice the standard amount of suture per tube. The increased length (in excess of 9 feet) eliminates the necessity of rethreading the bobbin or replacing the spiral reel in long operations. It is possible to make 18 ties with this new suture. The manufacturers are confident that the improved suture packaging will permit lower prices and a 5 per cent saving to hospitals.

In Memoriam

GEORGE ANDREW WRIGHT
M.D., F.I.C.S.

George Andrew Wright was born in White Gate, Giles County, Virginia, on Sept. 11, 1881. After attending schools in White Gate, he took his premedical work at Roanoke College in Salem, Virginia, and qualified for his degree of Doctor of Medicine at the University College of Medicine (now the Medical College of Virginia, Richmond, Virginia) in 1904. After doing undergraduate work at the Virginia Home for Incurables in Richmond from 1902 to 1904, he became house surgeon at Virginia Hospital in Richmond. In 1905 he went to the New York Post Graduate Hospital and Medical School for additional work and completed his graduate studies at Lying In Hospital in New York, Cleveland Clinic (Crile Clinic) in Cleveland, Ohio, and with study under the direction of Dr. Irving W. Potter, F.A.C.S., of Buffalo, New York. From 1918 to 1922 he was assistant superintendent of Southwestern State Hospital, Virginia. In 1922 he became associate surgeon and obstetrician at George Ben Johnston Hospital in Abingdon, Virginia, and in 1927 returned to Southwestern State Hospital, serving there as superintendent until 1937. From 1940 until his death he was clinical director and chief surgeon at Lee Memorial Hospital, Marion, Virginia, and also served as visiting surgeon at Southwestern State Hospital. He also taught in the Nurses' Training Schools in Richmond and Abingdon, Virginia.

Dr. Wright's work was in general surgery and orthopedic surgery. In addition to his more formal courses in graduate work, he studied for six months with the late Dr. Fred H. Albee, F.A.C.S., F.I.C.S., of New York City, and had an intensive course in operative surgery on cadavers with Dr. John McAllister of New York City.

Dr. Wright was an ex-President of the Medical Society of Southwest Virginia, and a member of the Medical Society of Virginia and of the American Medical Association. Since 1945 he has been a Fellow of the International College of Surgeons. At the time of his death he was President of Lee Memorial Hospital and of Southwest Virginia Hospital, Inc. His writings on surgical subjects added greatly to the knowledge of surgical technics and had wide influence upon the growth and development in the field of surgery. He was a potent figure both in his chosen work and in the College, and his judgment and abilities will be greatly missed when his colleagues unite at future meetings to discuss surgical trends and exchange information.

LEONARD MARTIN THOMPSON
M.D., A.I.C.S.

Dr. Leonard Martin Thompson died on March 22, 1954, in Lena, Illinois, after a short illness. Born in Chicago on Feb. 21, 1900, he did his premedical work at Loyola University and then attended the University of Chicago School of Medicine, where he qualified for the degree of Doctor of Medicine in 1922. After interning at Washington Park Hospital in Chicago from 1922 to 1923, he served as resident at Cook County Hospital from 1924 to 1925. He then became affiliated with St. Francis Hospital and Deaconess Hospital in Freeport, Illinois, and served them from 1926 to 1939. In 1936 he went to Columbia University in New York City, New York, for graduate work in surgery. In addition to earlier positions, he became a staff surgeon at Lena Community Hospital, Lena, Illinois, and was Chief Surgeon there at the time of his death. In 1943 he worked under the preceptorship of Dr. Max Thorek, F.I.C.S., at the American Hospital in Chicago, and in 1945 he did additional graduate work at the Cook County Graduate School in that city.

Dr. Thompson was a member of the American Medical Society, the Illinois State Medical Society, the Stephenson County Medical Society, the Mississippi Valley Medical Society, the Association of Railroad Surgeons, the American Academy of General Practice and the Theta Kappa Psi Medical Fraternity. He was surgeon for the local Illinois Central Railroad.

In September 1952 Dr. Thompson became an Associate Member of the International College of Surgeons. He has been an active participant in College affairs since that time, and an enthusiastic worker for the ideals and principles of the organization. The College wishes to join his friends and colleagues in extending sympathy to his family in their bereavement.

SPECIAL COURSE IN UROLOGY

Professor Dr. Raymond Darget, President of the Section on Urology of the International College of Surgeons, has begun a series of international réunions of urologists in Bordeaux, France, that will continue during the winter half-year. The first meeting, attended by **Drs. Bernard Fey,** F.I.C.S., of Paris, France, and **Alfonso de la Peña,** F.I.C.S., of Madrid, Spain, was very successful.

Professor Darget will also present a special course in Urology at the Hôpital du Tondu, Bordeaux, France, from June 6th to June 10th, following the European Congress of the Collège International des Chirurgiens in Geneva, Switzerland. This course will be conducted in two sections. Section 1 will cover the treatment of malignant tumors of the bladder including radium therapy and considering palliative treatments such as denervation of the bladder and uretero intestinal anastomosis. Section 2 will be centered around the treatment of malignant tumors of the prostate, discussing radium therapy and perineal and ischio rectal implantation of radium needles.

The course will include operations, cadaver work, lectures and the presentation of patients suffering from the aforementioned malignant neoplasms.

The number of participants admitted to the course is strictly limited, so all doctors interested are urged to write for additional information to the Collège International des Chirurgiens, 17, Rue Castéja, Bordeaux, France, as soon as possible.

DOES NOT CIRCULATE

The Journal of the International College of Surgeons

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Section II

Bulletin of Meetings—Announcements

National and International Activities

Vol. XXIII *June 1955* No. 6

INTERNATIONAL GOLLEGE OF SURGEONS

SCHEDULE OF MEETINGS

INTERNATIONAL—NATIONAL—REGIONAL

1955 — **INTERNATIONAL**

Oct. 12-16	Third Congress, Brazilian Section	Belo Horizonte, Brazil
Oct. 22-23	Meeting of Austrian Section	Vienna, Austria
Oct. 22-26	Second Panamerican Congress International College of Surgeons	Mendoza, Argentina
Oct. 30	Second Congress, Japanese Section	Tokyo, Japan

NATIONAL: UNITED STATES AND CANADIAN SECTIONS

Sept. 12-15	20th Annual Congress	Philadelphia, Pennsylvania

REGIONAL

July 1-4	Eastern Division	Cape Cod, Massachusetts

1956 — **NATIONAL: UNITED STATES AND CANADIAN SECTIONS**

Sept. 9-13	21st Annual Congress	Chicago, Illinois

1957 — **NATIONAL: UNITED STATES AND CANADIAN SECTIONS**

Sept. 8-12	22nd Annual Congress	Chicago, Illinois

1958 — **NATIONAL: UNITED STATES AND CANADIAN SECTIONS**

Sept. 7-11	23rd Annual Congress	Atlantic City, New Jersey

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Section II

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National and International Activities

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Section II

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George Herman Friedman, M.D., F.I.C.S., Denver, Colorado
Edward Burton Claxton, M.D., F.I.C.S., Bartow, Georgia

Pen Portraits of Distinguished Fellows

of the

International College of Surgeons

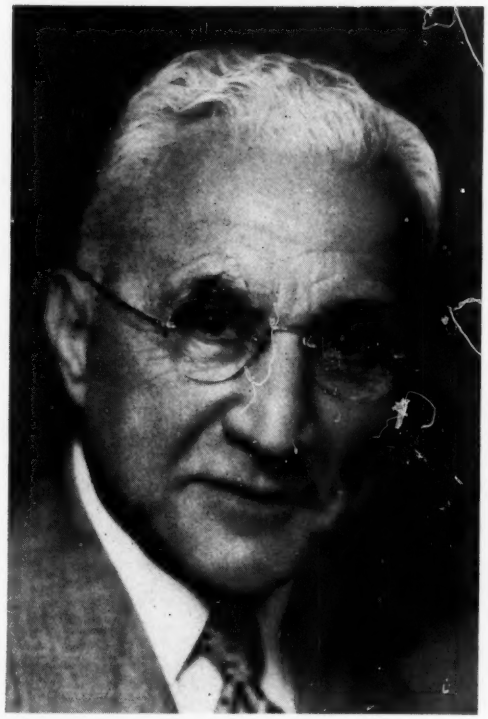
MOSES BEHREND, M.D., F.A.C.S., F.I.C.S.

Moses Behrend, M.D., F.A.C.S., F.I.C.S., was born on June 6, 1877, in Philadelphia, Pennsylvania, and has spent his life in service to the community in which he was born and to the ideal of "Brotherly Love" upon which that city was founded.

After taking his degree of Doctor of Medicine at the University of Pennsylvania Medical School in 1899, Dr. Behrend continued his studies in the United States and Europe, dedicating himself and his numerous talents to the furthering of research and the advancement of technics in general surgery, and specializing in the field of thoracic surgery. During World War I he taught Naval Units at Jefferson Medical College in Philadelphia where, for many years, he has been on the surgical staff. During the second World War he taught surgery for five years to the second year class of Jefferson Medical College and acted as consulting surgeon to the Draft Boards.

On January 11, 1905, he married Clara Rosenbaum in Philadelphia, and believes that much of his success is due to her faith in his abilities and her constant encouragement and devotion. Dr. and Mrs. Behrend have three children: a son, Albert Behrend, M.D., F.A.C.S., F.I.C.S., and two daughters, Ruth Behrend Hagedorn, who writes for magazines, and Jeanne Behrend MacManus, who is a concert pianist appearing under the name of Jeanne Behrend.

Dr. Behrend has held a number of hospital appointments, including that of attending Surgeon at Philadelphia General Hospital, 1930-1934; Thoracic Surgeon for the State of Pennsylvania, 1937-1941; Thoracic Surgeon at Philadelphia General Hospital, 1934-1943; Thoracic Surgeon at St. Agnes Hospital in Philadelphia, 1950-1954, and Surgeon to the Einstein Medical Center, Philadelphia, 1952 to the present time, in addition to his service at Jefferson Medical College, where he is Associate in Surgery.



Dr. Moses Behrend

He is a Fellow of the International College of Surgeons and a member of the Qualifications Board of the College. He is also a member of the American Medical Association, the Philadelphia College of Physicians, the Pediatric Society and the

Pathological Society, and is a Fellow of the American College of Surgeons. In 1926 he served as President of the Philadelphia County Medical Society and in 1935 was President of the Medical Society of the State of Pennsylvania. He has published more than 150 papers on surgical subjects and, in 1947, F. A. Davis Company of Philadelphia published his definitive work, *Diseases of the Gall Bladder and Allied Structures.*

Dr. Behrend is an able amateur photographer who finds pictures wherever he goes. In addition to this hobby, popular with so many surgeons, he is an avid golfer and a tennis enthusiast, haunting the courses and courts at home and in the localities he visits either as a vacationer or as an active member of the College.

For he is one of the most reliable, energetic and able members of the United States Section and of the International College as a whole. No demand on his time is too great; no service is too heavy; no duty is too small. When a need is made known, he faces the problem and comes up, not only with an answer, but with the right answer. Having devoted his life to the service of humanity, he is the epitome of the principles and ideals of the Fellows of the International College of Surgeons. The College looks forward hopefully to years of growth built upon the courage and devotion of such men as Moses Behrend.

Interesting Sidelights

Ninety per cent of today's prescriptions are for medicines that didn't even exist fifteen years ago.

* * *

For the first time, milestones in the history of pharmacy are being recorded in oil paintings which show major developments in the apothecary's art from before the dawn of history to the present. This important contribution to history is being sponsored by Parke, Davis & Company and is scheduled for completion in 1957.

* * *

Despite the great advances in medical science in the past 20 years, tons of "old time" vegetable drugs are still imported annually from places such as Haiti, France, Latin America and Asia.

President's Page

Ten years ago I was what might be termed a moderate Middle Western isolationist. We Middle Westerners think we live in the garden spot of the world (barring a few months of winter). We have plenty of rainfall, marvelous soil, beautiful crops, profitable farms, no droughts, an occasional flood, a few tornadoes, wonderful industries, and a healthy vigorous people. There is really nothing more that we could want — or so it has always seemed.

For example, if we want to go fishing, sailing, or swimming, we have five beautiful lakes right here in Madison, eight thousand in Wisconsin and ten thousand in Minnesota. There is hunting in all our states. If we find the climate too hot in summer, we motor to our northern lakes or to one of the Great Lakes where we can relax in cool, refreshing breezes. If it is too cold in winter, we fly to Florida, California or Arizona in a few hours.

What is more important, we can fly to Europe or South America overnight. So the world has rapidly grown smaller in the past decade. That alone has taken away much of our isolationism.

Ten years ago I was quite content to see America first and had no particular thought or interest in seeing the world. In 1948 I became a member of the International College of Surgeons, and immediately a great change occurred in me and in my point of view. Today I am an internationalist and very proud of the fact that in many countries I now have good friends among the Fellows with whom I correspond regularly. All these members of the College have been my hosts on one or several occasions and, like the other members of the American section who have made these sojourns, I feel deeply indebted for their wonderful hospitality.

Traveling has a broadening influence on midwestern isolationists like myself. We have learned that wonderful people are to be found everywhere. The hearts

Dr. Arnold S. Jackson, F.A.C.S., F.I.C.S.

of all good men and women beat pretty much alike, regardless of color, race, or creed. From my experiences, I am sure that a hundred Latins, a hundred Chinese and a hundred American surgeons could hold a medical meeting with profit and pleasure, provided the language barrier was removed and political ideologies submerged. Why do men have to go off on political tangents? Why, when there is plenty of land for all to live and let live, do certain ideas become so indoctrinated in any man that he can never be satisfied until he has tried to force his view upon everyone else?

The International College of Surgeons can and should become a great instrument for world peace, and not among surgeons alone. Another midwesterner, Wendell Willkie, was one of the first to promulgate the idea of one world, and had he lived I

feel sure he would have become an honorary member of our College, as did the late Albert Einstein.

With our twelve thousand members scattered throughout sixty-seven countries of the world we have a great opportunity. We also face a real challenge to bring all races and all countries to a better understanding of one another. Our Hall of Fame in Chicago provides a home in which to welcome surgeons from all over the world. Twenty-eight countries already have accepted the opportunity of decorating a room in honor of their surgical immortals. Here is a home where surgeons of every race and creed can meet on common ground. Surely this is an important step in furthering world peace and in isolating isolationism.

About the time this message reaches our readers, hundreds of surgeons will be heading for Geneva by ship, plane, train and car from far-away India, Japan, Pakistan, Formosa, Thailand, the Philippines and other Asian lands; from Peru, Argentina, Brazil and other South and Central American countries; from Canada and Mexico; from Turkey, Egypt and Israel; from Africa; from the Scandinavian countries; from England, France, Holland, Spain, Belgium, Germany, Italy, Austria, Switzerland, and Portugal; from other lands too numerous to mention, and finally from our own forty-eight states. Just how large the American contingent will be we shall not know until registration day, but several hundred registered at Madrid in 1952.

This will be my fourth European trip since 1950. In 1954, I missed the Torino meeting because I attended the meeting in South America. Needless to say, I am looking forward to this visit with more enthusiasm than ever—a far cry from my isolationism of the forties. It will be wonderful to show Mrs. Jackson and Marjorie the sights of Europe: the grandeur of the Alps; the historic monuments and the shops of Paris; the Colosseum and the Forum in Rome. Most of all, I want them to know my friends in the College—Ferdinand and Elizabeth Verbeek and the Chapchals from Holland; the Finsterers, Mandls and Schönbauers from Austria; the Dargets, Iselins, and Lègers from France; the Soler-Roigs and de la Fuentes from Spain; the Brailsfords and Abels from England, and the Bendandis, Dogliottis and Paoluccis—father, daughter and son-in-law—from Italy. These are but a few of the wonderful friends made in other years. They will also meet our charming hosts, the Jentzers, the Nissens and the Nicolets.

One of the most enjoyable features of these excursions is the opportunity of getting better acquainted with our own fellow countrymen. It was while flying to Gander on our last trip that I learned what good singers my neighbors, the Bornemeiers from Chicago, are. It was in front of the Louvre on our 1952 journey that I ran out of camera film and found a good friend in Charles Barone, who shares my enthusiasm for photography. In Italy, where Clarence Moore of Harrisburg was managing to live for two weeks without his lost suitcase, I really learned to know this fine friend. Sightseeing in Rome and Paris, I gained a delightful group of Texan friends—the Hayes, the Shermans, and others. One can look back on such experiences for years to come.

Above all, I am deeply grateful for the fine leaders of the College—William MacCarty, Herbert Acuff, Custice Lee C. Hall, André Crotti, Henry Myerding and, especially, Max Thorek—who encouraged me to abandon my isolationism and become a member of the International College of Surgeons.

ARNOLD S. JACKSON, M.D

United States and Canadian Sections

New Jersey Regional Chapter Meeting

The New Jersey Regional Chapter of the United States Section of the International College of Surgeons held a scientific session at the Murdoch Hall, Jersey City Medical Center, on May 14, 1955, according to the announcement received from **Dr. Earl J. Halligan, F.A.C.S., F.I.C.S.**, Regent of New Jersey.

In keeping with the tradition of the College favoring postgraduate education, the papers were planned to be of value not only to the surgeon but to the internist and the general practitioner as well. The latest scientific advances in various fields were discussed.

A full day's program was planned, with luncheon served at Murdoch Hall, in the Medical Center which is now the seat of the new Seton Hall University Medical and Dental College. The committee for the session expressed their appreciation to **Mayor Bernard J. Berry** and the **Commissioners of Jersey City** for the privileges granted to the College. The schedule was as follows:

8:00-9:00 a.m. Registration and inspection of hospital

SCIENTIFIC PROGRAM

9:00-9:30 a.m. **Jonathan C. Gibbs, M.D.; R. Vincent Grieco, M.D.,** and **James E. McKeown, B.A.**, physicist, Jersey City:
Evaluation of Peripheral Arteriosclerotic Insufficiency Utilizing Iodinated I-131 Human Serum Albumin

9:30-10:00 a.m. **Moses Behrend, M.D., F.A.C.S., F.I.C.S.**, Philadelphia:
Some Aspects of Gallbladder Surgery

10:00-10:30 a.m. **Alfred A. Strauss, M.D., F.A.C.S., F.I.C.S.**, Chicago:
The Development of Relative Immunity in a Patient Following Surgery and Surgical Diathermy in Carcinoma of the Stomach and Colon, with Clinical End Results Since 1915

10:30-11:00 a.m. **Sebastian J. Carnazzo, M.D., F.A.C.S., F.I.C.S.**, Omaha:
Bilateral Oophorectomy and Adrenalectomy in Far Advanced Carcinoma of the Breast

11:00-11:30 a.m. **Ulysses Grant Dailey, M.D., F.A.C.S., F.I.C.S.**, Chicago:
Recent Trends in World Medicine

11:30 a.m.-12 m. **Gerald H. Pratt, M.D., F.A.C.S.**, New York:
Surgical Treatment of the Occluded Major Arteries

12 m.-1:30 p.m. Luncheon

1:30-2:00 p.m. **Max Thorek, M.D., F.Sc., L.L.D., F.B.C.S., F.I.C.S., F.P.C.S. (Hon.), F.R.S.M.**, Chicago:
Hematoma of the Rectus Abdominis Muscle

2:00-2:30 p.m. **Arnold S. Jackson, M.D., F.A.C.S., F.I.C.S.**, Madison, Wis.:
Hyperthyroidism

2:30-3:00 p.m. **Ross T. McIntire, M.D., F.A.C.S. (Hon.), F.I.C.S. (Hon.)**, Chicago:
Advances in the Use of Blood Fractions in Surgery

3:00-3:30 p.m. **Charles P. Bailey, M.D., F.A.C.S., F.I.C.S.**, Philadelphia:
Rheumatic Valvular Heart Disease

3:30-4:00 p.m. **Earl J. Halligan, M.D., F.A.C.S., F.I.C.S.; Louis L. Perkel, M.D., F.A.C.P.,** and **J. Kenneth Catlaw, M.D., F.A.C.S., F.I.C.S.**, Jersey City:
Problems in the Diagnosis and Treatment of Gastric Disease: Presentation of Cases

Dr. Halligan expressed his appreciation of the work done by the program committee, which consisted of **Dr. J. Kenneth Catlaw, F.A.C.S., F.I.C.S.**, Chairman; **Dr. Irving Marshall, F.I.C.S.**; **Dr. John Imhoff, F.I.C.S.**, and **Dr. Steven Mickewich, F.I.C.S.** The officers and members of the New Jersey Chapter were greatly pleased with the large number of surgeons and members of allied professions who attended the session, and look forward to an even larger attendance at their next meeting.

Alabama Chapter Elects Officers for 1955-56

The Alabama Chapter of the United States Section, International College of Surgeons, recently elected **Dr. E. L. Gibson** of Enterprise as President and **Dr. Stephen A. Zieman** of Mobile as Vice-President. **Dr. Paul W. Shannon** of Birming-

ham, Secretary-Treasurer, was reelected.

These enthusiastic, energetic members of the Alabama Chapter will carry on the work of their predecessors and, in doing so, will advance the Chapter to new heights in the work of the College and in the fulfillment of its principles and ideals. The Fellows of the International College of Surgeons wish them well in their offices.

New Regent Takes Office in Virginia

Elbyrne Grady Gill, M.D., F.A.C.S., F.I.C.S., formerly of the Credentials Committee of the State of Virginia, has recently been made Regent for the State. He takes over the office of **Thomas Jefferson Hughes,** M.D., F.I.C.S., who has done such an excellent piece of work as Regent. Dr. Gill's address is 711 South Jefferson Street, Roanoke, Virginia.

Prof. John Hertz Appointed to Medical Faculty of the University of Stockholm

Prof. John Hertz, M.D., F.S.C.S., F.I.C.S., was honored in January by appointment to the status of full professor in Oral and Maxillary Surgery at the University of Stockholm by the Swedish king and his Government.

Dr. Hertz was born in Copenhagen, Denmark, on Oct. 3, 1906. In June 1924 he took the University matriculation examination in mathematics and science and in June 1931 received his medical degree from the University of Copenhagen. This institution was founded in 1478, and in 1931 its medical school was still the only one in Denmark.

It is interesting to note the rigorous requirements for the M.D. degree demanded by this University. After a year's study, a minor examination is taken in chemistry and physics. Two and a half years later a much more difficult examination is taken in anatomy, physiology and biochemistry. After a further two and a half years, the student is examined in general and special pathology, bacteriology and pharmacology. The final examination, comprising surgery, internal medicine, gynecology, dermatology and syphilology, obstetrics, pediatrics, forensic medicine, and covering the obligatory courses in psychiatry, hygiene, neurology, ophthalmology and otorhinolaryngology, is taken the following year. This means a total of seven years of study in medical school; it cannot be completed in less time.

John Hertz, M.D., F.I.C.S.

In September 1931, after having served his internship at the Lying-in Hospital of the University in Copenhagen, Dr. Hertz received his license to practice.

In addition to the work already completed in obtaining his degree, Dr. Hertz was required to put in at least seven additional years of study and practical work in various hospital departments, the length of service in the various departments depending on the specialty chosen. He fulfilled the requirements imperative in his specialty by work in the University Hospital of the University of Copenhagen (both surgical wards and out-patient departments), the County Infirmary at Roskilde, the Pathological Institute of the Kommune Hospital in Copenhagen, the County Infirmary at Gentofte, the Epidemic Hospital of Copenhagen, the County Infirmary in Hälsingborg, Sweden and the X-ray Department of Bispebjerg Hospital in Copenhagen. In January 1941, during the last-mentioned period of service, Dr. Hertz was authorized as a specialist in surgery by the Board of Health of Denmark.

Dr. Hertz did not consider his training completed, even after this intense study, but went on to work as resident at the Lying-in Hospital, Ward B, of the University Hospital until March 1, 1942. He then became acting chief surgeon at Sorö County Infirmary at Haslav and on Feb. 1, 1943, became chief of the Danish Surgical Department at Karolinska Sjukhuset,

Stockholm, Sweden. He also served as Acting Assistant Surgeon at this hospital in the Surgical Department until Sept. 10, 1945, and during this time was attached as surgeon to Radiumhemmet (the radium hospital in Stockholm), where he dealt with tumor surgery. In addition he served as assistant surgeon to the Invalidity Insurance Board for several terms between July 1941 and August 1943.

Dr. Hertz is a member of the Copenhagen Surgical Society, the Danish Surgical Association and the Danish Medical Society. He is a Fellow of the Scandinavian College of Surgeons and of the International College of Surgeons. He has numerous scientific papers to his credit.

It is evident that few men are as highly trained or as progressive as this eminent Danish surgeon. It will not occasion any wonder that a man of his calibre and achievements should be honored by the appointment recently given him by His Majesty the King of Sweden and his government. His colleagues in the International College of Surgeons are honored in his appointment and look forward to greater achievements on the part of this outstanding and worthy member of the College.

LA PRESSE MEDICALE

La Grand Journal Français de Chirurgie et de Medicine parait chaque semaine, et donne toutes les informations scientifiques et professionelles

ABONNEMENT

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Argentine Section

International College of Surgeons Announces Second Pan-American Congress

The International College of Surgeons announced recently that on Oct. 22-26, 1955, the Second Pan-American Congress of the College will be held in Mendoza, Republic of Argentina, in cooperation with the Eighth Argentine Session of Thoracic Surgery.

The Congress will hold round table discussions on four main themes: *Medical and Surgical Treatment of Goiter; Modern Treatment of Lung Abscesses; Surgical Treatment of Cancer of the Rectum and Sigmoid Colon,* and *Mycosis and Osteomyelitis of the Maxillary Bone.* The additional subjects that will be discussed in conjunction with the Eighth Argentine Session of Thoracic Surgery are *Surgical Treatment of Persistent Artery Duct* (Conduit) and *Peroral Endoscopy: Recent Attainments.*

During the Congress there will be operative sessions, clinics, film presentations, round table discussions, radiographic expositions and open forums devoted to the discussion of various subjects. The scientific sessions will be held in Central Hospital, Mendoza, which offers a selection of lecture halls capable of accommodating participants satisfactorily.

The program announced for the Congress is as follows:

Saturday, Oct. 22, registration of members and guests at 10 a.m. followed by a social meeting in the afternoon. Sunday, Oct. 23, the official inauguration of the Congress at 10 a.m. followed in the afternoon by a sightseeing trip in and around Mendoza. Monday, Tuesday, and Wednesday mornings: 7:30, operative sessions; 9:30, clinics held in two lecture halls, and 10:30, round table discussions in three lecture halls. At 5:00 p.m. on Monday there will be an inspection tour of the hospital. At 6:00 p.m. Monday, Tuesday and Wednesday, films will be shown, and at 7:00 p.m. papers and discussions on various subjects will be offered in three lecture halls. At 8:30 p.m. Wednesday the Congress will be officially closed.

Following the close of the Congress, at 9:30 Wednesday evening, a banquet will be held in the Golf Club of Mendoza to provide those who participated in the Congress and their guests an opportunity to meet informally and become better acquainted.

Dr. Jorge A. Taiana, President of the Argentine Section of the College, has issued an invitation to all members interested in this great Congress, which is designed to bring surgeons from all the countries in the Americas into a closer relationship. If you wish to attend the Congress please write the **Argentine Section of the International College of Surgeons, Caseros 2153, Buenos Aires.** Those wishing to present papers on the official themes of the Congress are requested to communicate with the Secretary, **Dr. Abel N. Canónica,** at the above address, before Aug. 30, 1955, advising the program committee of the title of the paper to be read.

It is the hope of the Argentine Section that this second Pan-American Congress will be even more successful and widely attended than was the first session, since the interchange of ideas and technics at such Congresses are exceptionally valuable both to the participating members and to the advancement of surgery.

Asunto: Segundo Congreso Panamericano
22-26 de Octubre 1955
Mendoza, República Argentina

Distinguido consocio:

Tengo el agrado de dirigirme a Ud., para poner en su conocimiento que del 22 al 26 de octubre próximo se realizará en la ciudad de Mendoza el Segundo Congreso Panamericano del Colegio Internacional de Cirujanos.

En dicho Congreso se tratarán en mesa redonda cuatro temas:

Bocio. Tratamiento médico y quirúrgico.

Absceso de pulmón. Tratamientos modernos.
Cáncer de colon y recto sigmoideo. Tratamiento quirúrgico.
Micosis y osteomielitis del hueso maxilar.

Invitámosle a colaborar en el mismo enviando antes del 31 de agosto próximo los títulos de los trabajos ya sean en relación a los temas oficiales o de temas libres que Ud. piense presentar al Congreso.

Además conjuntamente con el Congreso se llevará a cabo las Octavas Jornadas Argentinas de Cirugía Torácica cuyos temas son los siguientes:

Absceso de pulmón. Tratamientos modernos.
Conducto arterioso. Tratamiento quirúrgico.
Endoscopía peroral. Adelantos recientes.

Durante el Congreso se efectuarán: sesiones operatorias, sesiones de mostración de enfermos, proyecciones cinematográficas, exposición de radiografías, instrumental y aparatos, en el Hospital Central en donde también tendrán lugar las sesiones científicas.

La inauguración del Congreso se efectuará el domingo 23 a las 10, en el teatro Independencia y la clausura se realizará en el Golf Club con un banquete, el día miércoles 26 a las 21.30.

Dentro de breves días recibirá Ud., el programa preliminar.

Descontando desde ya su colaboración al mayor éxito del Congreso, me es grato saludar a Ud., con la mayor estima.

JORGE A. TAIANA
Presidente
ABEL N. CANONICO
Secretario

As we go to press, we are saddened to learn of the death of a friend—the father of Prof. Dr. Carlos Gama, President-Elect of the International College of Surgeons. Officers and members of the College throughout the world will join us in extending to Dr. Gama and his family the deepest sympathy and the sincerest condolences.

Belgian Section

New Belgian Section Inaugurated

On Saturday, April 30, 1955, a meeting was held in Brussels, Belgium, at which the Belgian members of the French Section of the International College of Surgeons united together to accomplish the long-anticipated organization of the Belgian Section of the College. The group of eminent Belgian surgeons who met in the Domus Medicorum, 9, rue Ten Bosch, adopted a constitution for the new Section and elected the officers who will direct the course of the organization during this critical year when the aims and future accomplishments of the Section will have their beginnings. The officers elected are:

President: **Dr. Léopold Lambert,** 242, Boulevard d'Avroy, Liège;

Vice-President: **Dr. Simon Masy,** 256, Chaussée de Wavre, Heverle-lez-Louvain;

General Secretary: **Dr. Franz-André Sondervorst,** 124, Avenue de Alliés, Louvain, and

General Treasurer: **Dr. Georges de Toeuf,** 137, Avenue Maréchal Joffre, Brussels.

In a letter from the officers of the Belgian Fellows of the College, Dr. Lambert and Dr. Sondervorst expressed their gratitude to the International organization for its understanding and helpful cooperation in the past, and stated that the members of the Belgian Section were looking forward to the Congress in Geneva, which they would, for the first time, attend as members of an established Section. They stated that they hoped, at that time, to express in person their appreciation for the messages of good will from the other Sections and from **Dr. Max Thorek,** Founder of the College, which were read at the organizational meeting.

The International College of Surgeons indeed welcomes the formation of this Section which brings together in an autonomous group so many brilliant Belgian surgeons, and anticipates success and a healthy growth that will advance the principle of the brotherhood of man upon which the College is founded.

The Secretariat Général of the Belgian Section has been established at 124, Avenue des Alliés, Louvain.

BRONCHOESOPHAGOLOGY COURSE OFFERED

The next bronchoesophagology course to be given by the University of Illinois College of Medicine is scheduled for the period Oct. 24 to Nov. 5, 1955. The course is under the direction of **Dr. Paul H. Holinger,** F.A.C.S.

Interested registrants will please write directly to the Department of Otolaryngology, University of Illinois College of Medicine, 1853 West Polk Street, Chicago 12, Illinois.

Israeli Section

Delegates of the United States Section Visit Israel

The widely traveled delegation of surgeons from the United States Section of the International College of Surgeons flew into Tel Aviv via El Al Israel Airlines on Friday afternoon, November 19, at the invitation of the President of the Israeli Section, **Dr. Daniel Fritz Peyser,** Director of the Surgical Department of Rothschild Hospital in Haifa and of the Israeli Minister of Health, the **Hon. Mr. Josef Serlin.**

The members of the party from the United States were met at the airport by a group of members of the Israeli Section led by **Dr. Bernhard Neumann,** a member of the College who is in the Ministry of Health. After the reception committee had seen the visitors through the customs and immigration inspection they escorted them to the Hotel Dan, one of the most modern, spacious and excellently run hotels of Tel Aviv or, for that matter, anywhere else in the world. After a good night's rest the delegation, directed by a very competent guide, drove to Tiberias on the Sea of Galilee, noting on the way the great advances being made in living conditions throughout Israel. They were interested in the many miles of farm land under cultivation, in the reforestation projects through the mountainous regions, in the terracing of the mountains for farming in products the soil is most suited for, and in the wide cultivation of grapes and of fruit trees.

The group spent the night and several hours the following day in Tiberias beside the Sea of Galilee, visiting the new pavilion being built to accommodate the many people with various arthritic ailments who go to Tiberias to take the health baths. The hot water which has fed these baths for more than 2000 years streams down over the rocks at a constant temperature of 140 degrees. The party then continued their drive to Jerusalem, noting on the way some of the pipe laid for the 200 mile pipe line to the Negev Desert from Tel Aviv, an irrigation project planned to advance farming and other industry in this desert region. They also caught glimpses of Haifa where the beautiful harbor, not unlike that of Naples, shelters boats of every variety including ocean liners.

In Jerusalem the visiting surgeons were presented at an audience with the **President of Israel, Mr. Ben Zwi.** The presidential mansion is called the "White House" but the beautiful wooden building is not white at all. The lovely interior of the "White House" is lined with native pine wood. His Excellency the President, with his first Lady, greeted the group from the United States cordially, and discussed matters over their coffee cups. This was one of the high points of the visit, since President Ben Zwi and his wife are exceptionally charming people and did everything in their power to make the audience memorable. The next morning, after a night at the palatial King David hotel, the group went sightseeing in Jerusalem, visiting Mt. Zion and other places of interest.

They went out to the Tuberculosis Hospital for Children, where 150 youngsters of all ages, some almost infants, are being

Prof. Zondek introducing Dr. Max Thorek at the meeting of the Israeli Section of the College in Jerusalem.

Audience of the visiting Fellows from the United States Section of the College with His Excellency the President of Israel in Jerusalem.

treated. They also saw the excavation work being done for the new Hadassah hospital just outside Jerusalem.

On returning to the city, they attended a reception in their honor at the home of the President of the University of Jerusalem. During this day the most important events were the scientific papers presented at the meeting of the Israeli Section of the International College of Surgeons. This was a very impressive meeting of the comparatively new Section which has been led

Entrance to the Medical School, Jerusalem, where the scientific meetings of the Israeli Section were held.

Minister of Health, Minister of Education, the United States Counsel General to Israel respond to toast to the International College of Surgeons on the occasion of the meeting of the Israeli Sectio

Address by the Minister of Public Health of Israel at the meeting of the College in Jerusalem.

to great heights by the leadership of such men as **Dr. Georg Wolfsohn,** F.I.C.S., Chief, Department of Surgery, Bikur Cholim Hospital, Jerusalem; Dr. Daniel Fritz Peyser; **Dr. Ernest Lehmann,** Director, Urological Department, Beilinson Hospital, Petach-Tiqvah; **Dr. Ernst Wodak,** Hadassah University Hospital, Tel Aviv, and **Dr. Bernard Zondek,** F.I.C.S. (Hon.), Hadassah University Hospital, Jerusalem. This strength and depth of leadership has brought the formation of the Section in Israel to speedy fruition, and it is certain that this growth and potential greatness will continue in the future. The papers which were read were illuminating, their presentation was excellent and the Fellows and their visitors found the meeting valuable both from the standpoint of education and from that of fellowship.

That evening a dinner was given by the Israeli Section in cooperation with the Hadassah Medical Organization at Hadassah Hospital 'E' on the Street of the Prophets in Jerusalem. Dr. Wolfsohn, in his address at this meeting, said, "In the year 1951 it fell to my lot to found the Israel Chapter of the International College of Surgeons and I had the honor to act as its first president for three years. During this period I frequently expressed the hope to see amongst us the Founder **Max Thorek,** and several letters crossed the Atlantic in this connection. It is thus a special joy for me to find this wish realized and to enjoy tonight his company together with this group of eminent American surgeons, if only for very few days.

"Our young and small section has often, during its short existence, sought and obtained the experienced counsel of its elder brothers in the United States of America and in Canada. For this we are ever grateful, and we are bound to be in need of advice and assistance for years to come.

"This day will prove to be of historic significance to the Israeli Section of the College and I trust that you also, our guests, fellows, and friends, will retain a happy memory of the occasion, and that our mutual friendship may prosper.

"With this wish, I raise my glass and propose a toast to our friends and guests." With this the meeting of the Israeli Section was brought to a close.

The group returned to Tel Aviv where they dined and spent the night at the Hotel Dan. The following morning, in addition to an American style breakfast, a portable table was moved up to the main table to accommodate a variety of hors d'oeuvres. No one left Jerusalem hungry when they

Address by the President of the Israeli Section of the International College of Surgeons during the meeting in Jerusalem.

were driven to the airport for their flight on to Rome.

As many of the visiting surgeons had been in Israel prior to this visit, this was one of the truly interesting stops on this round-the-world tour of delegates from the United States Section. They will long remember the hospitality they received at each port of call, the wonderful entertainment, the brilliant lectures and above all that great feeling of Fellowship which is characteristic of the College.

SPECIAL COURSE IN UROLOGY

Professor Dr. Raymond Darget, President of the Section on Urology of the International College of Surgeons, has begun a series of international réunions of urologists in Bordeaux, France, that will continue during the winter half-year. The first meeting, attended by **Drs. Bernard Fey,** F.I.C.S., of Paris, France, and **Alfonso de la Peña,** F.I.C.S., of Madrid, Spain, was very successful.

Professor Darget will also present a special course in Urology at the Hôpital du Tondu, Bordeaux, France, from June 6th to June 10th, following the European Congress of the Collège International des Chirurgiens in Geneva, Switzerland. This course will be conducted in two sections. Section 1 will cover the treatment of malignant tumors of the bladder including radium therapy and considering palliative treatments such as denervation of the bladder and uretero intestinal anastomosis. Section 2 will be centered around the treatment of malignant tumors of the prostate, discussing radium therapy and perineal and ischio rectal implantation of radium needles.

The course will include operations, cadaver work, lectures and the presentation of patients suffering from the aforementioned malignant neoplasms.

The number of participants admitted to the course is strictly limited, so all doctors interested are urged to write for additional information to the Collège International des Chirurgiens, 17, Rue Castéja, Bordeaux, France, as soon as possible.

Japan Section

Dr. and Mrs. Garlock Visit Japan

Dr. John Garlock, F.A.C.S., F.I.C.S., and **Mrs. Garlock** recently toured Japan with their friends, **Dr.** and **Mrs. Field.** The visit was a combination of business and pleasure for Dr. Garlock, since he spent a great deal of his time visiting the Japan Section of the International College of Surgeons, meeting a number of the Japanese Fellows of the College, lecturing at several hospitals and observing surgical and other medical work throughout Japan.

The hospitable people of Japan, however, would not allow him to make the entire trip a "busman's holiday" but saw to it that Dr. and Mrs. Garlock and their friends were royally entertained. Among their outstanding Japanese hosts were **Dr. Komei Nakayama,** President of the Japan Section, and **Dr. Shinichiro Kikuchi,** F.I.C.S., Head of the Kikuchi Surgical Hospital in Tokyo.

The Japan Section, under the able leadership of Dr. Nakayama, has become an active group of brilliant surgeons leading the way in Japanese surgery and in matters of general health, and constantly growing in prestige and influence both in Japan and throughout the world.

Dr. and Mrs. John Garlock on lecture tour in Japan, February 1955.

At the home of Dr. Kikuchi. *Left to right*: Mrs. John Garlock, Mrs. Fields, Mrs. Nakayama, Mrs. Kikuchi, Dr. Nakayama and Dr. Kikuchi.

Dr. Kikuchi entertains Dr. and Mrs. John Garlock at his home in Tokyo when Dr. Garlock was on lecture tour in Japan, February 1955.

Dr. John Garlock visits home of Dr. Kikuchi. *Left to Right*: Mrs. Nakayama, Dr. Garlock, Mrs. Garlock, Mrs. Field, Dr. Field, Mrs. Kikuchi, Dr. Nakayama and Dr. Kikuchi, with children.

French Section

French Section Meets in Niort

A successful meeting of the French Section was held in Niort on March 27, 1955. The large number of Fellows present represented every region of France and included **Dr. Franze-André Sondervorst,** General Secretary of the new Belgian Section, who for many years had been associated with the College. Members from Paris, Bordeaux, Dakar, Nantes, Angers, Tours, Poitiers, Douai, Reims, Thouars, Saintes and Mont-de-Marsan were particularly numerous.

The Hospital of Niort, where the meeting was held, was founded by the late Dr. Renon, in whose memory a bust, recently placed in the Court of Honor of the Hospital, was dedicated during the meeting. The Hospital is an excellent, progressive institution, with the latest equipment and facilities for education and research. Members attending the meeting enjoyed the opportunity to visit and inspect this modern and impressive hospital unit.

Dr. Lafitte, director of the Medical Center, and **Drs. Pierre H. R. Suire,** F.I.C.S., and **Claude Dumeau,** F.I.C.S., participated in the scientific program, which was concentrated around the main themes covering the indications, advantages and contraindications of the surgical use of antibiotics in their most recent forms. Dr. Sondervorst was Honorary President for the meeting. After scientific papers on additional subjects had been presented, the scientific portion of the program was concluded with an open forum.

A reception for the Fellows present was then held at the City Hall, followed by a banquet which was widely attended by members and guests. The attendants at this excellent meeting were most enthusiastic and thoroughly appreciated the work done by the committee in planning both the outstanding scientific presentations and the interesting social entertainment which closed the session.

Participants of the French Section of the International College of Surgeons meeting at Niort in front of the monument of the late Dr. Rinon. Arrow points to Dr. Lafitte of Niort. Other members, *left to right:* Dr. Thalheimer (with briefcase), Prof. Darget, Prof. Ameline, Prof. Sondervorst and Dr. Iselin.

Woman's Auxiliary

Mrs. Lassiter Visits Japan

Mrs. Charles T. Lassiter, sister of **Dr. William Randolph Lovelace,** F.A.C.S., F.I.C.S., Past-President of the United States Section of the International College of Surgeons, visited various members of the Japan Section during her recent tour of Japan.

Among others who entertained Mrs. Lassiter was **Mrs. Komei Nakayama,** wife of the President of the Japan Section. Mrs. Nakayama, besides being an active assistant to her husband in his College activities, and a gracious hostess to visiting Fellows and their wives, is a gifted sculptor and the creator of many fine pieces of statuary.

Mrs. Lassiter greatly appreciated the kindness shown her during her stay in Japan, and looks forward to the time when she may return the hospitality so generously provided by Mrs. Nakayama and other Japanese women. Since Dr. and Mrs. Nakayama expect to be present at the forthcoming assembly in Philadelphia in September, the women of the Auxiliary, and Mrs. Lassiter in particular, will do their utmost to make them feel as welcome here as they have done many times to make members from the United States feel at home in Japan.

Mrs. Lassitter, sister of Dr. William Randolph Lovelace, F.A.C.S., F.I.C.S., Past President of the International College of Surgeons, with Mrs. Komei Nakayama, wife of the President of the Japan Section, in Tokyo.

News Notes From Your President

This month there are several items of interest that we want to bring to your attention. These matters were discussed at the last business meeting held by the Board of the Woman's Auxiliary which met at the Home of the International College of Surgeons, 1516 Lake Shore Drive, Chicago, Illinois, on May 7.

* * *

As you all know, in a number of areas the Regional Chapters have been holding scientific meetings such as the ones held recently in Houston, Texas, and Washington, D. C. Members of the Auxiliary have, in several cases, taken charge of the arrangements for entertainment other than the scientific programs. For the coming Regional meeting on Cape Cod the first of July, **Mrs. M. Leopold Brodny** planned the program for the enjoyment of the members and guests who will be attending (see April *Bulletin*).

Mrs. Herbert W. Goebert is now working diligently on the plans for the Twentieth Annual Congress of the United States and Canadian Sections which will be held in Philadelphia Sept. 12-15, 1955. Members of the Auxiliary will handle the registration for this Congress on Sunday afternoon, September 11. The Woman's Auxiliary will have a Hospitality Room at one of the hotels to provide a meeting place

for the members and their guests at the Congress—a place where they can drop in for morning coffee and afternoon tea; where they can linger for a few minutes to visit with old friends and become better acquainted with the new ones they will meet in Philadelphia. Among other events planned will be a tour to places of historical interest in Philadelphia and the vicinity, with a stop for luncheon *en route*.

We urge as many of you as can do so to attend both the Regional meetings and the Congress in September, where you will find that the Woman's Auxiliary has its definite role to play in the affairs of the College, and where you will be able to see how effectively the Auxiliary can work to make these meetings a greater source of interest and of friendship for everyone.

* * *

An excellent suggestion made by one of the Board members at the business meeting may be of interest to you. She has noted that many people are accustomed to paying tribute to the memory of a friend or relative each year, and suggested that they might be glad to use the Woman's Auxiliary Memorial Fund as the means of expressing their respect, since the Fund provides a vitally important living memorial for those remembered. Please consider this suggestion and let us hear from you.

* * *

It is our hope that you will take time each month to READ the *Bulletin*. We feel that every member of the Woman's Auxiliary has a vital interest in the work of the College. Few of us can be well informed unless we devote a few minutes to reading of the meetings, the projects, and the future plans which are recorded in these pages.

Gail Brooks Burket
President

For information pertaining to qualifications for

FELLOWSHIP, ASSOCIATE AND JUNIOR MEMBERSHIP

in the United States Section
of the International College of Surgeons

Write KARL A. MEYER, M.D., F.A.C.S., F.I.C.S., Secretary
1516 Lake Shore Drive, Chicago 10, Ill.

The Medical Newsfront

La Presse Medicale Awards Motion Picture Prizes

At the end of a public film-projecting session held on March 29 at the New Faculty of Medicine in Paris, three films were mentioned by **Prof. Cathala** as having been presented from *La Presse Medicale's* competition for medical and surgical motion pictures. These were as follows:

Cytologic Aspects of Immuno-Hematology, by **M. Bessis**

Bloodstains, by **Messrs. Piedelievre** and **Michon**

Radiocinematology in the Pathologic Study of Digestive Diseases, with the Use of the Brilliancy Amplifier, by **M. Porcher**

The following awards were made in their respective categories:

Medical Films

J. M. Dubois de Montreynaud (Reims), for his film *French Technique for Bronchoscopy, with Some Endobronchial Considerations*

Surgical Films

Didactic: **E. Henry** and **F. Curel** (Marseille) for their film *Some Difficulties in Cholecystectomy*

Technical: **Merle d'Aubigne** (Paris) for his film *Tendon Transplantation for Paralysis of the Opponens Muscles of the Thumb*

Foreign Films

C. E. Engel (London) for his film *Mitral Valvotomy for Mitral Stenosis*

Honorable mention was awarded to each of the following films selected by the jury:

Corneal Grafting, by **P. Hansell** of London

Whooping Cough, by **P. Perreau** of Angers

Breech Delivery, by **R. A. Suzor** and **P. Polilarchetti** of Paris

The next awarding of these prizes, which will be the fifth, will take place in March-April 1956. Applications will be received up to the end of February 1956 and should be addressed to *La Presse Medicale,* 120 Boulevard Saint-Germain, Paris VI, France.

Hebrew Medical Journal Celebrates Twenty-Seven Years of Continuous Publication

Dr. Moses Einhorn, Editor of the *Hebrew Medical Journal,* a bilingual, semi-annual publication now concluding its twenty-seventh year of continuous publication, proudly points out that Hebrew, the language of the prophets, has become a living tongue in modern Israel. "The revival of the Hebrew language and its extension to all modern uses, medicine included," he points out, "is a remarkable achievement. We are proud of the fact that throughout the years of its publication, our journal has played a leading role in the creation of a medical terminology and literature in Hebrew."

The Fall Issue of 1954 included in its table of contents articles on *The Parkinson Syndrome* by **Israel S. Wechsler,** M.D.; *Treatment of Tuberculous Menengitis* by **Abraham Levinson,** M.D.; *Angina Pectoris* by **A. B. Rimmerman,** M.D.; *Gerontology —With Special Reference to Israel* by **Ch. U. Nitzany** (Genazzani), M.D.; *Sterilization and Eugenics in Jewish Law* by **Rabbi I. Jakobovitz,** and a section on Maimonides (Moshe ben Maimon) in commemoration of the 750th anniversary of his death.

In a biographical sketch contributed by Dr. Moses Einhorn, some of Maimonides' memorable maxims on what makes a good doctor are quoted: "Besides the power to heal, a doctor must possess an independent mind"; "Medicine is necessary to man, not only when he is sick, but also when he is healthy"; "A doctor must be a whole man, observant, cautious, and attentive to each patient on the presumption that his case is individual and special." Other articles on this medieval physician and philosopher are *The Influence of Religion and Philosophy Upon Maimonides as Physi-*

cian; Maimonides' Opposition to Occultism, and *The Impact of Maimonides Upon Medieval Writers in the Field of Medicine.*

The articles are published in Hebrew, with summaries in English that completely cover the Hebrew text. The editorial staff of the Journal welcomes any inquiry regarding this outstanding Hebrew publication. For further information please write the editorial office of the *Hebrew Medical Journal,* **983 Park Avenue, New York City, New York.**

Aero Medical Association Holds Meeting in Washington, D. C.

The largest group of international flight surgeons ever assembled met in Washington, D. C., in March for the twenty-sixth annual meeting of the Aero Medical Association. **Major General Dan C. Ogle,** Surgeon General of the United States Air Force, was host to this group of flight surgeons and later escorted them on a tour of the United States Air Force Medical Service facilities in Alabama, Texas and Ohio.

Thirteen Surgeons General of the air forces of countries other than the host nation were present at the meeting and made the tour, which included visits to the School of Aviation Medicine at Randolph Field in Texas, the Air University at Maxwell Air Force Base in Alabama, Gunter Air Force Base in South Carolina and the Aero Medical Laboratory at Wright-Patterson Air Force Base in Ohio.

The twenty-four nations represented by one or more flight surgeons were Belgium, Brazil, Canada, Chile, China, Colombia, Egypt, Finland, France, India, Indonesia, Korea, The Netherlands, Norway, The Philippines, Rhodesia and Nyasaland, Spain, Sweden, Switzerland, Syria, Thailand, Turkey, Uruguay and Yugoslavia. The United States Air Force officers who accompanied General Ogle on the survey tour included **Col. Paul A. Campbell,** medical air attaché in London, and **Lt. Col. James C. Vanneter,** medical air attaché in Rome.

Dr. Charles L. Brown Becomes Dean of Newly Established Seton Hall

Dr. Charles L. Brown, M.D., D.A.B., F.A.C.P., will become the first Dean of the newly established Seton Hall College of Medicine on July 1, 1955, when his resignation as Dean of the Hahnemann Medical College, Philadelphia, Pennsylvania, will

Group of international flight surgeons who accompanied Maj. Gen. Dan C. Ogle, U.S.A.F. (M.C.), Surgeon General, on a tour of U. S. Air Force medical facilities following the twenty-sixth annual meeting of the Aero Medical Association held in Washington, D. C. *(Official U. S. Air Force Photo)*

become effective, according to an announcement made by **Monsignor John L. McNulty**, President of Seton Hall. Dr. Brown has been acting as a consultant for the College of Medicine since the first of the year.

Dr. Brown received his B. S. degree from the University of Oklahoma in 1919 and his Doctorate in Medicine from the same school in 1921. In 1923 he became an instructor in pathology at Harvard University Medical School. He participated in a teaching fellowship and served as an instructor in internal medicine at Harvard until 1928, when he joined the faculty of the University of Michigan Medical School as an associate professor of medicine. In 1935 he left Michigan to become head of the Department of Medicine at Temple University Medical School in Philadelphia, Pennsylvania. In 1946 he was appointed dean of Hahnemann Medical College and in 1948 assumed the additional duties of head of the division and the department of medicine at Hahnemann. He has held a number of other hospital positions, having served as resident pathologist at the Children's Hospital in Boston and chief of the department of medicine at the Philadelphia General Hospital.

Dr. Brown is a Fellow of the American College of Physicians and a Diplomate of the American Board of Internal Medicine. He is a former president of the Philadelphia County Medical Society and received the Strittmatter Award from that organization in 1951.

As Dean of the Seton Hall College of Medicine, Dr. Brown will retain the position of Chief Consultant in Internal Medicine to the Chief Medical Director of the Veterans Administration in Washington, D. C. He has contributed widely to the literature in his field and is currently engaged in writing a textbook on medical treatment in general practice.

Monsignor McNulty pointed out that Dr. Brown "has demonstrated an organizing and administrative ability that could be equaled by few and that has gained for him national recognition as an authority in medical education."

His immediate duties will be concerned with the determination of admission policy and procedures; the formulation of curricula; the screening of candidates for faculty appointment; the over-all pattern of organization for the Seton Hall College of Medicine, and the transformation of the sixteen-story clinical building in Jersey City Medical Center into a medical education unit with classrooms, laboratories, conference rooms and library facilities.

Seton Hall College of Medicine and Dentistry, New Jersey's first institution of this kind, was incorporated by that state on Aug. 6, 1954. Ceremonies marking the formal establishment were held in the Medical Center on August 11, and were attended by public officials, prominent educators and professional men.

New Scientific Organization Established

The American College of Angiology announces its organization as a scientific body dedicated to the teaching, research and distribution of knowledge concerning the science and practice of angiology. Simultaneously the College is taking the responsibility for publication of the periodical *Angiology* as its official journal.

The first meeting of the new College was held in Atlantic City, New Jersey, on June 4, 1955, and members of the medical profession were invited to attend. The College will also function as a Specialty Board for the certification of qualified physicians and surgeons as Fellows of the American College of Angiology.

The headquarters of the College are at 151 East 83rd Street, New York City. The College will be glad to supply further information on request.

Industrial Medicine and Surgery Meeting Scheduled

A joint meeting of the Chicago Society of Industrial Medicine and Surgery with the Central States Society of Industrial Medicine and Surgery will be held at the Palmer House in Chicago, Illinois on June 18, 1955, according to an announcement

made by **Dr. Donald B. Knowles,** President of the Chicago Society.

At 2 p.m., after short business meetings of the two societies, a scientific session will be held. The outstanding feature of the program planned is a panel discussion, *Industrial Medicine and Surgery: Its Present and Future,* with **Dr. Edward C. Holmblad,** F.A.C.S., acting as Moderator. The panel will include **Dr. J. Wister Meigs,** Associate Professor of Occupation Medicine, Yale University; **Dr. Elston L. Belknap,** D.A.B., F.A.C.S., Professor and Director of Occupational and Environmental Medicine, Marquette University; **Dr. Joseph H. Chiver,** Medical Director of the Crane Company, and **Dr. George J. Cooper,** Consulting Surgeon, Chicago.

Additional information about the meetings may be obtained by writing the **Chicago Society of Industrial Medicine and Surgery, 28 East Jackson Boulevard, R. 1300, Chicago 4, Illinois.**

Damon Runyon Cancer Fund Aids Research on Melanoma

Research into the development of melanoma, one of the most malignant forms of cancer, will be aided by a third grant from the Damon Runyon Cancer Fund to **Dr. H. Clark Dalton,** associate professor of biology at New York University's Washington Square College of Arts and Science.

Three thousand two-hundred dollars was recently presented to Dr. Dalton by **Harold F. Crawford** and **Bennett L. Kulak** of the Fraternal Order of Eagles, who are the largest single contributors to the Damon Runyon Cancer Fund, having donated more than $500,000 to date.

Dr. Dalton has now received a total of $9,200 from the fund for support of his research program into "Control of Melanophore Differentiation by Skin Tissues." Dr. Dalton is attempting to find the genetic foundations which control the development of pigmented cells, explaining that "abnormal growth of pigmented cells" leads to melanoma.

The research is trying to chart the course of normal pigmented cell development to find the controlling mechanism which may go awry, giving rise to the melanoma.

Working with the Mexican axolotl, a salamander that produces two strains, one white and one black, Dr. Dalton and his research assistant, Mrs. **Sonia Krassner,** are attempting to determine the causes of the pigmentation.

Schering Award Competition Opens

The opening of the tenth annual Schering Award Competition for medical students has been announced by **Dr. Robert W. Burlew,** chairman of the Award Committee. Its aim is to encourage medical writing and exploration of current research literature.

Three subjects on which American and Canadian students are invited to submit papers this year are: *Current Concepts in the Management of Osteoporosis; Prevention and Treatment of Blood Transfusion Reactions;* and *Recent Trends in the Clinical Use of Adrenocortical Steroids.*

Both a $500 first prize and $250 second prize will be awarded for each of the three subjects. Outstanding authorities in each field will select the winners. Special recognition in the form of a professional gift will be presented to each student submitting a meritorious paper.

The deadline for entry forms specifying the choice of title is July 1. Manuscripts should be mailed not later than October 1. Students may compete individually or in teams.

Information and instructions for the Award competition are available from the Schering Award Committee, 60 Orange Street, Bloomfield, N. J.

Plastic Surgeons to Meet in September

Dr. Kenneth G. Pickerell, Secretary, announces that the Twenty-fourth Annual Meeting of the American Society of Plastic and Reconstructive Surgery will be held in Atlantic City, New Jersey, Sept. 25-30, 1955.

Dr. Truman Blocker and his Program Committee are striving to assemble a well-

balanced program, consisting of a series of seven-minute papers, another series of fifteen-minute presentations, an afternoon of motion pictures, two panel discussions and several informal study groups.

Dr. Leslie Backus, Chairman of the Membership Committee, has asked for communications with regard to potential new members for the Society, especially young men who will complete their training in July and who will be eligible for Candidate Membership. Dr. Backus may be addressed at 217 Linwood Avenue, Buffalo, New York.

Annual Prizes Awarded in Orthopedic Research

Charles W. Goff, M.D., F.A.C.S., was recently awarded the annual prize of a certificate of merit and $1,000 for the best research in orthopedics in the past three years. The award, which was presented at a meeting of the American Academy of Orthopedics, is supported by Kappa Delta, a national women's sorority. Dr. Goff's research dealt with disorders and disturbances affecting growing centers of bones in children and young persons, and was conducted in association with Yale University, where he is an assistant clinical professor of orthopedic surgery.

Vice-Chancellor Named

Major General George Ellis Armstrong, M.D., F.A.C.S., F.A.C.P., Surgeon General of the U. S. Army, has been named vice-chancellor for medical affairs at New York University, Chancellor Henry T. Heald recently announced.

Dr. Armstrong's appointment as chief administrative officer of the New York University-Bellevue Medical Center is effective after his retirement in July, which will follow a four-year tour of duty as Surgeon General. The new vice-chancellor has served with the Army for many years, having been an officer in the Medical Corps since his graduation from Indiana University Medical School in 1925.

Units of the New York University-Bellevue Medical Center are the College of Medicine, Post-Graduate Medical School, University Hospital, and various research institutes. **Dr. Donal Sheehan,** associate director of the Medical Center, has been acting director since the resignation in March 1953 of **Edwin A. Salmon.**

New Air Pollution Authority Appointed

Louis C. McCabe, nationally known air pollution authority, has been called to active duty as a commissioned officer of the Public Health Service, U. S. Department of Health, Education, and Welfare, **Surgeon General Leonard A. Scheele** has announced. Dr. McCabe will serve as Staff Advisor on Air Pollution to **Assistant Surgeon General Mark D. Hollis,** Chief Sanitary Engineer of the Service and Chief of the Division of Sanitary Engineering Services. Dr. McCabe will be stationed in Washington, D. C., and will be responsible for technical staff activities and program liaison with other Federal agencies.

This is the second major appointment in air-pollution-control activities filled by the Public Health Service this year. **Arthur C. Stern,** formerly Chief Industrial Hygiene Engineer of the New York State Department of Labor, recently assumed direction of the program of air pollution research and technical assistance to state and local agencies, with headquarters at the Robert A. Taft Sanitary Engineering Center, PHS, Cincinnati, Ohio.

Eaton Research Grant to Hektoen Institute

The Hektoen Institute for Medical Research of the Cook County Hospital, Chicago, has been awarded a research grant by Eaton Laboratories, Norwich, N. Y., to conduct a study of the treatment of infections of the urinary tract. In announcing the investigation, **Dr. Paul F. MacLeod,** medical director of Eaton Laboratories, stated that the study will cover seven months.

New Editor Appointed for Journal of Aviation Medicine

Col. Robert J. Benford, U.S.A.F. (M.C.), will take over the editorship of the *Journal of Aviation Medicine*, official organ of the Aero Medical Association, according to an announcement by **Brigadier General Otis O. Benson Jr.**, U.S.A.F. (M.C.), president of the organization.

Col. Benford, a native of Omaha, Nebraska, worked on the staff of the Omaha *World Herald* prior to attending the College of Medicine at the University of Nebraska. He served as air surgeon of the XX Bomber Command during World War II and later as commander of the AAF Aero Medical Center in Heidelberg, Germany, where he was responsible for collecting all available scientific and historical information concerning the wartime achievements of the Luftwaffe flight surgeons. Since July 1, 1953, he has been editor of the *Armed Forces Medical Journal.*

Scientists Isolate Direct Reactor to Action of Thyroid Hormone

It is only recently that University of Wisconsin scientists have been able to isolate, for the first time, the portions of living cells and tissues which respond directly to the action of the thyroid hormone thyroxine. This initial step in unraveling the basic chemistry of the thyroid's ability to control the speed of body metabolism was announced by **Prof. Henry Lardy** of the University of Wisconsin's Institute for Enzyme Research at a meeting of the American Chemical Society.

The work was done by Prof. Lardy and two co-workers, **Dr. Gladys Maley** who worked on enzymatic aspects of the hormone, and **Dr. Ken Tomita** who solved certain chemical problems.

That the amount of thyroxine produced by the thyroid gland determines the rate of the living body's basal metabolism has been known a long time, but the chemical reactions responsible for this effect have been a mystery. Learning the enzyme system on which the hormone works is a major discovery.

Thyroxine is converted by the body into a substance named tri-iodothyronine before it affects the cell's enzyme system. In the laboratory it is possible to add either thyroxine or tri-iodothyronine to test-tube preparations of the enzyme system and obtain increases in metabolism and respiration. The same occurs in the human body when thyroid hormone is administered.

The enzyme system influenced by the hormone is a natural part of the microscopic powerhouses found in every living cell. Called mitochondria, they carry on much of the energy-extracting and energy-transmitting functions of living cells and tissues. Prof. Lardy said tri-iodothyronine acts by decreasing the efficiency with which the body traps the energy in food, but it speeds up the machinery of metabolism. He compared the reaction to putting an automobile into second gear—the engine speeds up, efficiency is lowered, but total power available is greater. The hormone acts specifically on the enzyme systems that carry on intermediate metabolism of carbohydrates, Prof. Lardy said.

Tri-iodothyronine prolongs the test-tube life of mitochondria carrying on oxidative processes. This may simply be a result of test-tube conditions, but if it holds true in the living organism, the substance may be more beneficial than now realized in maintaining tissues—particularly those directly involved with energy reactions such as muscle tissue—in a vigorous condition.

International Society for the Study of Biological Rhythm Announces Conference

The fifth conference of the International Society for the Study of Biological Rhythm will be held Sept. 15-17, 1955, at the Karolinska Institutet, Stockholm, Sweden. The principal subjects for discussion will be rhythmic phenomena in the nervous system, cybernetics, and rhythm and industrial medicine. The National Science Foundation offers a limited number of travel grants to American scientists who

wish to attend. Applications must be received before April 25. All correspondence should be addressed to **Prof. Ture Petrén, Karolinska Institutet, Stockholm 60, Sweden.**

Study of Prosthetic Devices Published

The April issue of *Engineering Research Review,* quarterly publication of the Research Division of the New York University College of Engineering, features an article on the NYU Engineering Research Division's study on prosthetic devices, sponsored by the Advisory Committee on Artificial Limbs of the National Research Council and the Veterans Administration.

Under the study, NYU engineers, therapists, and psychologists evaluate all new prosthetic devices brought before the Advisory Committee. The group also conducts a program in prosthetic education and field testing in 75 civilian and V. A. clinics in 40 major population centers.

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New Products

Announce First Synthetic Non-Narcotic

Romilar Hydrobromide, the first synthetic, non-narcotic drug to have the same antitussive action as codeine without sharing its drawbacks, has just been announced by Hoffmann-La Roche Inc. It represents a significant advance in cough therapy having a specific effect in suppressing the cough reflex.

Published statistical analyses of more than 18,000 observations made during clinical comparison of Romilar and codeine have established that 10 mg. of Romilar is equivalent in antitussive activity to 15 mg. of codeine. Unlike codeine, however, it is non-narcotic; it has no analgesic activity, no constipating effect and no addiction liability. Chemically, Romilar is d-3-methoxy-N-methylmorphinan hydrobromide.

Phelantin Kapseals

Parke, Davis & Company has developed a new drug combining 100 mg. (1½ gr.), Dilantin, 30 mg. (½ gr.) phenobarbital and 2.5 mg. (1/25 gr.) desoxyephedrine hydrochloride for the treatment of certain patients with epilepsy or other convulsive disorders. It has been named Phelantin (Fe-lant'-n) and comes in capsule form in bottles of 100 Kapseals each. It is sold by prescription only.

National Heart Institute Studies Narcotic Snuff

Cohoba, a narcotic snuff that was used by West Indian witch doctors at the time of Columbus, yields important chemical secrets to modern research. Scientists at the National Heart Institute of the Public Health Service, U. S. Department of Health, Education, and Welfare have recently probed the centuries-old mystery of Cohoba for the first time, crystallizing its active agent from a brown oil extract.

Dr. Verner L. Stromberg, one of the Heart Institute researchers seeking heart remedies in potent substances of nature, reports that the active agent of Cohoba is a compound called bufotenine. It is close in chemical structure to another natural product under study at the Institute, a substance obtained from the venom of tropical toads. Both are extremely active chemicals and may have important roles in the mechanisms of the body that control health or disease.

One of a number of variations of narcotic snuff made from the seeds of the Mimosa-like tree, *Piptadenia peregrina*, Cohoba was described in the very first ethnologic work on the new world, an account written in 1496 by Ramon Pane, who accompanied Columbus on his second voyage. **William Safford,** a scientist with the Bureau of Plant Industry of the Department of Agriculture, suggested that the most remarkable fact connected with *Piptadenia peregrina* was that, though its fruit had been reported by many explorers and botanists as highly narcotic, it had never been studied chemically or therapeutically, and the source of its intoxicating properties still remained unknown.

Though he wrote his report in 1916, the suggestion was not carried out until Heart Institute scientists isolated the bufotenine in 1954. The seeds for the NHI study were secured through the Agricultural Research Service from Las Mesas, Puerto Rico.

Because the substance has a temporary effect upon the mind, it is now under study by investigators of the National Institute of Mental Health, while other Heart Institute laboratories are exploring how mechanisms important in heart and blood vessel function are affected by this and similar chemicals.

In Memoriam

LOUIS BARETZ
M.D., F.A.C.S., F.I.C.S.

On March 4, 1955, Dr. Louis Baretz died suddenly of a heart attack in his home in Brooklyn, New York, at the age of 59.

Born in South Norwalk, Connecticut, on January 26, 1896, Dr. Baretz attended the New Haven High School in New Haven, Connecticut, and then registered for premedical work at the Sheffield Scientific School of Yale University. He received his Ph.B. degree in 1916 and went on to study medicine at Yale University Medical School where he took his M.D. degree in 1920.

After interning at Jewish Hospital in Brooklyn from 1920 to 1922, he was appointed to the staff where he continued to serve until his death. In 1925 he did postgraduate work in Urology at Mt. Sinai Hospital in New York City and in 1949 became attending urologist at Jewish Hospital. He also served in the Long Island College Hospital Dispensary from 1922 to 1926 and at Kings County Hospital, joining the staff in 1926 and holding the position of Associate in Genito-Urinary Surgery at the time of his death. Since 1940 he had also been an instructor in urology at the Long Island College Medical School.

Dr. Baretz was a member of the American Medical Association; the Brooklyn Urological Association; the Kings County Medical Society, and the New York Academy of Medicine. He was a diplomate of the American Board of Urology and a Fellow of the American College of Surgeons. In August 1946 he became a Fellow of the International College of Surgeons and has been an enthusiastic and active participant in the work of the College.

A urologist of outstanding ability, Dr. Baretz enjoyed the confidence and respect of his colleagues, among whom his personal and professional prestige was very high. Perhaps even more important was the respect and admiration held for him by his students, many of whom have become leading urologists. The loss of a surgeon of this caliber is a matter of deep regret, not only for today but for the many years during which he might have shared his knowledge and understanding.

GEORGE HERMAN FRIEDMAN
M.D., F.I.C.S.

Dr. George Herman Friedman, 55, died in General Rose Memorial Hospital, Denver, Colorado, last April after a long illness. Born in Russia on Sept. 23, 1896, he came to the United States with his parents who settled in the midwest. After attending the University of Minnesota from 1919 to 1922, he went to Marquette University School of Medicine, where, in 1926, he received the degree of Doctor of Medicine. He served his internship at Mt. Sinai Hospital in Milwaukee, Wisconsin, and in 1927 became a resident at Johnston Emergency Hospital. He then became assistant in general and industrial surgery to Dr. S. H. Wetzler of Milwaukee and from 1928 to 1942 served in the outpatient department of the Mt. Sinai dispensary.

In 1942 Dr. Friedman entered the Army. After seven weeks of intensive training in general and thoracic surgery at Cook County Hospital and Billings Memorial Hospital, he served in United States Army hospitals in general, thoracic and orthopedic surgery, and was then sent overseas for work in England and Scotland. While in Great Britain he attended clinics at Ratcliff Infirmary and Wingfield Morris Hospital in Oxford, and spent some time at the University of Edinburgh and the Royal Infirmary. Upon his discharge from the army, he was appointed to the staff of the General Rose Memorial Ho-

pital in Denver, Colorado, and served in that capacity until the time of his death. From 1948 to 1951, when his illness became critical, he also acted as clinical instructor in surgery at the Colorado University School of Medicine.

He was a member of the American Medical Association, the Denver Medical Society and the Colorado State Medical Society. He also belonged to the American Legion and was a member of the Phi Delta Epsilon fraternity.

In 1951 he was made a Fellow of the International College of Surgeons and was an active member of the Colorado state organization until his serious illness confined him to the hospital, where his death was caused by carcinoma of the pancreas. During his illness the members of the Denver Medical Society expressed their admiration for his surgical abilities and his personal friendliness by granting him the status of membership active-emeritus. The Fellows of the College feel keenly the loss of this able colleague and join with his friends in Colorado in extending their deepest sympathy to his wife and family.

EDWARD BURTON CLAXTON
M.D., F.I.C.S.

Dr. Edward Burton Claxton was born in Bartow, Georgia, on December 2, 1883, and, with the exception of the years spent in Maryland preparing for his future in the medical profession, lived and worked in his native state.

After his preliminary education in the Bartow schools, he attended the Maryland College in Baltimore, where he received his degree of Doctor of Medicine in 1905. Immediately after completing his internship at Franklin Square Hospital in Baltimore, he returned to Dublin, Georgia, where he established his practice and became an active member in the community life of the city. In 1909 he did postgraduate work at Johns Hopkins University Medical School in surgery, and in 1917 studied at the New York Postgraduate School, taking a course in surgical technique upon the cadaver directed by Doctor George McHatten of New York City and a course in surgery under Doctor Charles Head, also of New York.

In 1927, with several other Georgian physicians, he founded the Claxton Hospital in Dublin, Georgia. This is a modern, well appointed and well equipped 65-bed hospital, serving a large population comprised primarily of people of moderate means. In addition to being chief surgeon at Claxton Hospital, he was Chief Surgeon of the Laurens County Hospital in Dublin for ten years and Chief Surgeon of Brigham-Claxton Hospital, also in Dublin, for five years. He was known throughout Georgia for his ability in general surgery.

Dr. Claxton was a member of the American Medical Association, the Georgia State Medical Association, the Sixth District Medical Society and the Laurens County Medical Society. In October 1947 he was made a Fellow of the International College of Surgeons and continued as an active, enthusiastic member until the day of his death.

His colleagues in the College join his many friends in Georgia in their sorrow at the death of this excellent surgeon and public-spirited citizen.

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